

EL MOTAMYEZ - SCIENCE Questions Bank
FINAL REVISION

Question 01 Choose the correct answers

1. Which of the following is a part of the biosphere?
   (a) Ice (b) Clouds (c) Animals (d) Water
2. All the following are from sources of water on the Earth, except ....
   (a) aquifers (b) ponds (c) glaciers (d) molten rocks
3. Presence of dolphins in oceans represents an interaction between ....
   (a) biosphere – hydrosphere (b) hydrosphere – geosphere
   (c) hydrosphere – atmosphere (d) biosphere – geosphere
4. The amount of salt water on the Earth is ....the amount of fresh water.
   (a) larger than (b) smaller than (c) equal to (d) half
5. All the following are saltwater lakes, except ....
   (a) Lake Assal (b) Lake Nasser (c) Lake Idku (d) Lake Bardawil
6. Rocks are broken down into smaller particles during .... process.
   (a) photosynthesis (b) weathering (c) erosion (d) respiration
7. Catfish can survive in ....water environment.
   (a) salt and still (b) fresh and fast (c) salt and current (d) fresh and still
8. Mosses fish are found in ....
   (a) lakes (b) Lake Burullus (c) streams (d) ponds
9. Most of fresh water on Earth is found in the form of ....
   (a) groundwater (b) rivers (c) glaciers (d) streams
10. Insects lay their eggs in systems that are found in ....
    (a) streams (b) ponds (c) sea (d) rivers
11. Weathering of rocks by water indicates an interaction between ....
    (a) hydrosphere and geosphere (b) biosphere and hydrosphere
    (c) biosphere and atmosphere (d) atmosphere and hydrosphere
12. The Earth's system which contains mountains is ....
    (a) atmosphere (b) geosphere (c) biosphere (d) hydrosphere
13. The number of Earth's layers that form geosphere is ....layers.
    (a) two (b) four (c) six (d) eight

14. Water covers nearly ....of the Earth planet.
    a) 1/4 b) 1/2 c) 1/5 d) 3/4
15. By heating of water it changes from ......state to ....state.
    a) solid – liquid. b) liquid – solid c) liquid – gas d) gas – liquid
16. Water is used in all the following purposes, except ....
    a) recreation b) burning c) bathing d) manufacturing
17. At the beginning of water cycle in nature, water ....and goes into the air forming ....
    a) freezes – snow. b) evaporates – clouds. c) freezes – clouds d) evaporates – snow.
18. Aquatic ecosystems can be classified into ....ecosystem and .....ecosystem.
    a) forest – desert. b) savannah – tundra c) grassland – rainforest. d) freshwater – saltwater.
19. All the following factors affecting the breakdown of plastics into microplastics, except................
    a) sunlight b) moon c) wind d) sea waves.
20. All the following materials can be used to filter wastewater in simple water filter, except ....
    a) cotton b) wood c) charcoal d) sand

Next Concept

21. Which of the following is found between pores of rocks below Earth's surface?
    a) ice b) groundwater c) oceans d) water vapour
22. Sand, charcoal and cotton can be used to remove all the following materials from wastewater, except ....
    a) small pieces of plastic b) salt dissolve in water c) small particles of mud d) small pieces of rocks
23. Humans can use water in all the following purposes, except ....
    a) fishing b) transportation c) generating electricity d) weathering of rocks
24. Among the kinds of wetlands are ....
    a) swamps and lakes. b) marshes and bogs. c) ponds and oceans. d) swamps and estuaries.
25. Seas and oceans water meet rivers water at ....
    a) watershed b) estuary c) surface canal d) underground
26. There are many concerns that threaten lots of water areas on Earth such as
    a) scarcity and poor quality. b) sustainability and poor quality
    c) poor quality and availability d) availability and quality
27. ....are formed when water collects in low-lying areas.
    a) Seas b) Lakes c) Rivers d) Oceans

28. The natural resource which is important to the survival of all living organisms is ....

(a) soil (b) oil (c) water (d) grass

29. The level of water in a river may increase causing flooding, when there is more

(a) rainfall (b) wind (c) sunlight (d) sediments

30. The moon revolves around Earth under the effect of ....

Next Concept

(a) Sun gravity (b) Earth gravity (c) rotation of Earth on its axis (d) movement of the moon around Earth

31. As the mass of the object increases, ...increases.

(a) its movement (b) its force (c) its gravity (d) its illumination

32. If the distance between the moon and Earth is doubled, the force of gravity ....between them.

(a) increases (b) vanishes (c) decreases (d) doesn't change

33. Object moves under the effect of ....forces.

(a) pull and push (b) pull and drag (c) revolving and push (d) pull and attraction

34. Magnet attracting paper clips is an evidence that magnet .....

(a) needs force (b) has a force (c) loses force (d) gains force

35. If the moon's mass is doubled, ...

(a) its distance away from Earth is doubled (b) the moon may collide with Earth
(c) it attracts Earth (d) it goes away from Earth

36. The friction force between objects usually acts on slowing down their motion, this is because that force ....

(a) acts in the same direction of their motion. (b) acts with their motion in their strength and direction.
(c) acts in opposite direction to their motion. (d) increases their motion in the opposite direction.

37. When throwing an object up, it ....

(a) returns again to Earth under effect of gravity. (b) floats in space because there is no gravity.
(c) clings (suspended in air) because its gravity is equal to that Earth. (d) moves fast towards space.

38. A force that is created between two attached surfaces leading to slow movement is called ....force.

(a) pushing (b) dragging (c) friction (d) pulling

39. The force affecting the moon to orbit the Earth is ....

(a) Earth gravity (b) Sun gravity (c) moon gravity (d) Earth magnetism



40 Parachute helps in ....

- (a) increasing the velocity of object falling to the ground
- (b) slowing down the velocity of object falling to the ground
- (c) decreasing the air resistance against the falling object
- (d) increasing the drag of object in the direction of gravity

41 Magnet has the force of attracting metals such as ....

- (a) iron and nickel
- (b) aluminium and copper
- (c) silver and gold
- (d) aluminium and silver

42 A table stands on the ground needs ....to move.

- (a) sunlight
- (b) mass
- (c) force
- (d) air

43 Which of the following objects has the least attraction force?

Next Concept

- (a) The moon
- (b) The Earth
- (c) The Sun
- (d) The magnet

44 The idea of sundial depends on ....

- (a) formation of shadows
- (b) rotation of object around its axis
- (c) the apparent movement of the sun
- (d) falling of objects under the effect of gravity

45 Planets continue revolving around the sun in fixed orbits under the effect of

- (a) Earth gravity
- (b) Sun gravity
- (c) Planets gravity
- (d) Moon gravity

46 Succession of day and night is due to ....

- (a) revolution of the moon around the Earth.
- (b) revolution of the Earth around the Sun.
- (c) rotation of the moon on its axis.
- (d) rotation of the Earth on its axis.

47 At midday, the sun is located ....

- (a) from your right side
- (b) from your left side.
- (c) above your head.
- (d) in front of you.

48 The reason of seeing the apparent movement of the stars at night, although they are not changing their locations ......

- (a) the rotation of the moon on its axis.
- (b) the apparent motion of the sun every day.
- (c) rotation of Earth on its axis in front of the sun.
- (d) revolution of Earth in an elliptical orbit around sun.

49 Heat and light energies of the sun result from ....

- (a) explosion of the extremely hot gases inside the sun.
- (b) the apparent of the sun motion daily.
- (c) revolution of Earth in an elliptical orbit around the sun.
- (d) revolution of the moon around Earth in front of the sun.

50 Stars 'illumination and shinning in the sky is considered evidence that ...

- (a) they are composed of extremely hot gases.
- (b) they are under the effect of sun gravity.
- (c) they belong to our solar system.
- (d) they are from the followers of the sun.

51 Planets of the solar system revolve in fixed orbits under the effect of gravity of ....

Earth | (b) Sun | (c) Moon | (d) Jupiter

52 If the gravity between the sun and planets of solar system is vanished (disappear) , this will lead to ....

(a) planets will move directly towards the sun.
(b) planets will attract to each other.
(c) planets will float into space.
(d) planets will explode under the effect of their gravities.

53 We can see thousands of ....in the sky at night that give off heat and light.

(a) moons (b) stars (c) planets (d) satellites

54 Our solar system contains ....

(a) one star (b) one planet (c) one moon (d) no stars

55 We cannot send astronauts to study stars because they are ....

(a) so cold (b) faraway (c) too small (d) too large

56 The moon takes one lunar........... to complete one cycle around the Earth.

(a) year (b) week (c) month (d) day

57 At the beginning of lunar month we can see the edge of the moon is illuminated at.................... phase.

(a) crescent (b) gibbous (c) full moon (d) new moon

58 ....locate(s) at the center of our solar system.

(a) The moon and the Sun. (b) The moon and the Earth. (c) The Sun only. (d) The Earth only.

59 The Sun is a star that gives out a very big amount of ....

(a) heat only. (b) light only. (c) heat and light (d) heat and sound.

Question 02 PUT (√) OR (×)

1. Microplastics are large plastic pieces which can harm oceans and aquatic life. (   )
2. If there is no hydrosphere, the biosphere will not exist. (   )
3. Wells and springs obtain their water from aquifers. (   )
4. We can drink the water of Lake Assal. (   )
5. Water makes about two-thirds of human body. (   )
6. There are no living organisms live in the hydrosphere. (   )
7. We cannot drink the water of seas (   )
8. A river always flows from an area of low place to an area with higher place (   )

9 Leeches live on the surface of pond water ( )

10 Earth's systems interact with each other. ( )

11 Waterfalls are part of atmosphere. ( )

12 Atmosphere and hydrosphere affect water cycle. ( )

13 A glacier contains mixture of fresh water and salt water ( )

14 Lakes have fresh water only. ( )

Next Concept

15 Cotton can be used as a filter to remove waste materials from water. ( )

16 Valleys can be formed by rivers due to fast movement of river's water. ( )

17 Some human activities are responsible for water pollution ( )

18 Building factories is from human strategies to control and conserve fresh water. ( )

19 Dams can be used to filter polluted water to use again ( )

20 You can conserve water by leaving the tap open during brushing your teeth ( )

21 Upstream is the place where a river starts. ( )

22 The type of water in wetlands is salt water only. ( )

23 High quality of fresh water leads to the death of marine organisms live in it. ( )

24 Scarcity and conservation of fresh water are two main risks that threaten fresh water on Earth ( )

25 All living organisms need water to survive. ( )

26 Generating electricity is from the uses of water. ( )

27 When fresh water is polluted, it becomes drinkable. ( )

Next Concept

28 Earth revolves around the sun in a fixed path. ( )

29 All objects on Earth's surface are affected by magnetism force. ( )

30 Magnetism is the force that attracts metals. ( )

31 Any object on Earth's surface is affected by repulsion force of gravity ( )

32 The orbit of each planet has an elliptical shape. ( )

33 Air resistance is a factor that speeds up the falling objects toward the Earth. ( )

34 Gravity pulls objects toward the centre of Earth ( )

35 The scientist Nicolaus Copernicus stated that Earth revolves around the Sun. ( )

36 There is no air in space, so air resistance slows down the movement of objects through space. ( )

37 Air resistance is a type of pulling force. ( )

38 The direction and mass of an object are changed due to gravity. ( )

39 After leaving a squeezed spring, it has no force to return back to its original state. ( )

Next Concept

40 The moon phases occur due to the rotation of Earth on its . ( )

41 We can observe the Sun and the moon at night. ( )

42 At the beginning of the day, the Sun appears in the west direction ( )

43 Our solar system contains eight planets. ( )

44 The scientist Copernicus proved that the Earth is the center of the solar system. ( )

45 The moon has only one phase during the lunar month. ( )

46 Superhot gases of the Sun burn producing heat and light energies. ( )

47 Earth's revolution around the Sun causes day and night phenomenon. ( )

48 The Sun is necessary for continuity of life on Earth. ( )

49 The cycle of the moon phases repeated at the beginning of lunar month . ( )

Question 03

Complete the following sentences using words between brackets

1 A rat that digs a burrow in the soil is an example of the interaction between biosphere and .... [hydrosphere – geosphere]

2 The Earth's system that includes all living organisms is called .... [biosphere – atmosphere]

3 Water runs across the land is an example of an interaction between ....and geosphere. [biosphere – hydrosphere]

4 When a river meets a sea, ...is formed. [estuary – lake]

5 The large sheet of ice or snow that moves slowly over Earth's surface is known as .... [glaciers – hydrosphere]

6 The scientists who study water on Earth are called .... [hydrologists – astronauts]

7 Water is responsible for weathering and ....of rocks. [evaporation – erosion]

8 Abyssal zone in the ocean is a dark area as...........cannot reach it. [sunlight – sound]

9 Starfish and Moses fish live in .... [oceans – ponds]

10. The amount of fresh water on Earth is ....than the amount of salt water. [more – less]
11. 97% of Earth's water is .... [freshwater – saltwater]

Next Concept

12. In high Dam, water used to generate ...... [electricity – light]
13. The run out of ....causes wells to become dry. [groundwater – runoff]
14. We must take a quick shower to conserve ...,.. [saltwater – freshwater]
15. To conserve water, we can ....the time of washing our hands. [increase – decrease]
16. Some human activities may cause water .... [erosion – pollution]
17. An area of land where all the water flows to a common location is called .... [lake – watershed]
18. Deltas are formed by the deposit of sediments at the end of .... [underground – river]
19. The extinction of some species that live in fresh water is due to the poor ....of fresh water. [quality – source]
20. When the water is stored in the cracks and spaces of underground rocks, ...is formed. [estuary – groundwater]
21. The land that is partially covered with water is called .... [wetland – lake]
22. Human can ....water to recycle wastewater to be used again. [freeze – filter]
23. Clear water can be polluted if it is mixed with .... [mud – salt]
24. Groundwater is replaced by .... [air – rains]
25. The direction of the Earth's gravity is always toward ....of the Earth. [poles – center]
26. Any object has ......depending on its mass. [gravity – work]
27. Planets revolve around the Sun in ....orbit. [triangular – elliptical]
28. The force of gravity is always ......force. [magnetic – pulling]
29. The force that opposes the movement of objects as they pass through air is called .... [air resistance – gravity]
30. The force that slows down the movement of objects across solids, liquids or gases is called .... [magnetism – friction]
31. When a girl moves down a slide, this is due the force of .... [moving – gravity]
32. Without the force of gravity, the moon would ....off into space. [sink – float]

33. Earth is pulling the moon, keeping it in its ....around Earth. [orbit – circle]

34. Magnetism is a force that attracts .... objects. [metal – non-metal]

35. Force may be push or ....the object to make it move. [pull – repel]

36. The gravity of the Moon affects the phenomenon of ocean .... [waves – tides]

37. A person can control the speed of his bike by using ....to slow down its movement. [magnet – brakes]

Next Concept

38. When the distance between the moon and the Earth increases, the gravitational attraction between them .... [increases – decreases]

39. The group of stars that make a certain shape in the sky is called .... [constellation – Sun]

40. The Earth spins around its axis once every ... [30 days – 24 hours]

41. The half of Earth that doesn't receive any light has...[day – night]

42. The fastest planet on its axis is ...... [Earth – Jupiter]

43. Ancient Egyptians used .... to know the time. [sunset – sundial]

44. Constellation ..... is one of the most famous constellations in the sky. [Orion – Milky Way]

45. The Sun appears as it rises in east direction and sets in ....direction. [north – west]

46. In the early morning the Sun would be at ....direction. [east – south]

Question 4 — Write scientific term for each of the following

1. A type of water which represents 3% of water area on the Earth's surface ( )
2. The process in which the small particles of rocks are transported from a place to another ( )
3. Areas of the ocean which contain coral reefs and intertidal zones. ( )
4. The frozen water part of the hydrosphere. ( )
5. The plastic particles that result from the breakdown of large plastics. ( )
6. The water bodies that surround the continents. ( )
7. It is a system that includes all living organisms such as microorganisms, plants, animals and humans ( )

8	It is a system that includes all the gases that surround the Earth.	( )
9	They are very deep areas in oceans that sunlight cannot reach.	( )
10	It a large region of the world that has similar soil, climate, plants and animals.	( )
11	A cycle shows the continuous movement of water from the Earth to the atmosphere then to the Earth again.	( )
12	The area of the coast that disappears underwater at the high tide and appears at the low tide.	( )
13	The process of breaking down of rocks into smaller particles due to the effect of wind , water or temperature.	( )
14	A water body that is surrounded by land	( )
Next Concept		
15	A type of pollution which occurs as a result of throwing waste in rivers and seas	( )
16	A triangular shaped area of mud and other sediments that forms when a river meets a sea	( )
17	It is an area of land where all the water flows to a common location usually an ocean, a sea or other large water bodies	( )
18	It is a land area which is partially covered with water	( )
19	The large water body that is surrounded by land	( )
20	A building established across a river which can hold water behind it.	( )
21	The type of water which is found in seas and oceans	( )
22	A type of water which is suitable for drinking.	( )
Next Concept		
23	The force of attraction that changes the direction of a moving object in air towards the ground	( )
24	It is a pull or push that affects an object	( )
25	An invisible force that attracts metal objects to the magnet.	( )
26	The Sun and eight planets revolving around it.	( )
27	A phenomenon takes place in oceans and seas due to the gravity of the moon	( )
28	The force that slows down the movement of objects through air.	( )
29	The tool that is used by skydivers to slow his drop.	( )
30	A celestial body that orbits the Earth	( )

31 The change of an object position when force acts on it. ( )

32 The force between two objects that don't touch each other ( )

33 The force between two objects that touch each other ( )

Next Concept

34 They are giant spheres of superhot gases most of them are hydrogen and helium. ( )

35 A dark object that revolves around Earth and reflects the sunlight falling on its surface ( )

36 An imaginary line that passes through the two poles of Earth. ( )

37 The sun and eight planets revolving around it. ( )

38 It is a group of stars, planets and gases held together by gravity. ( )

39 The law which states that the force of gravity is constant and acts on all object in the same way. ( )

40 The orbiting of Earth around the Sun ( )

41 It is a medium-sized star that provides Earth with heat and light ( )

42 The dark celestial bodies that revolve around the Sun in fixed orbits ( )

43 A constellation appears in the sky as a mythical hunter. ( )

Question 5 correct the underlined word

1 During the water cycle, water evaporates forming rains. ( )

2 When rain falls on soil, this represents an interaction between biosphere and geosphere ( )

3 Nitrogen in the air is a part of geosphere. ( )

4 As water covers ¾ of the Earth's surface, our planet appears in white colour from space ( )

5 When the fresh water of a river meets the salt water of a sea, runoff is formed. ( )

6 During the water cycle in nature, water evaporates forming rains ( )

7 The atmosphere includes all forms of water on Earth. ( )

8 Frogs lay their eggs in running water, so the eggs will not move away ( )

9 Throwing waste materials in seas and oceans causes air pollution ( )

10. Fresh water forms about 97% of water on Earth. ( )
11. Planets orbit Earth due to the gravity between them ( )
12. Earth pulls objects towards its moon ( )
13. The gravity of the Sun affects the ocean tides ( )
14. The gravity force of Earth to a person in a flying airplane is equal to that when the same person stands on the ground ( )
15. The Earth locates at the center of the solar system ( )
16. The planets revolve around the Sun in fixed rectangular orbits ( )
17. Earth attracts the Sun to move around it. ( )
18. If the mass of the moon decreases, its gravity force will increase. ( )
19. The Sun forms the shorter shadow of an object at the morning. ( )
20. The Earth spins around its axis once every 20 hours. ( )
21. Constellation consists of a group of planets that form a pattern ( )
22. Every night, new stars appear from west. ( )
23. Jupiter revolves around the Sun in a rectangular orbit ( )
24. The phenomenon of four seasons occurs due to rotation of Earth on its axis. ( )
25. First phase of moon phase appears at the beginning of each lunar month ( )
26. Phase of moon which appears in the half of the lunar month ( )
27. Phase of moon which appears in the last day of the lunar month ( )
28. The moon phase at which moon seems completely dark ( )

Question 06 Give reason for each of the following

1. Not every water sources is used as drinking water.

....

2. No green plants can survive in the abyssal zones of oceans.

....

3. Mosquitoes lay their eggs in ponds.

....

4. Our planet looks like a blue marble from the space.

....

5. Some ponds and lakes may dry up during some months.

....

6. Hiding of ants inside the soil is an example of an interaction between two Earth's spheres

....

7. The kind of water in oceans differs from that in rivers.

....

8. Recycling the plastic bottles is better than throwing them in seas and oceans.

....

9. More than 50% of known living organisms live in the aquatic environments.

....

10. Scientists tend to preserve freshwater sources on Earth.

....

11. Groundwater is called by this name.

....

12. Deltas are formed at the river's end.

....

13. The quality of fresh water affects the life of living organisms live in it.

....

14. The force of gravity has an important role in the solar system.

....

15. Gravity of Earth is greater than gravity of the moon.

....

16. A metallic ball reaches Earth's surface before a feather when they fall from the same place at the same moment.

....

17. The moon moves around the Earth.

....

18. The atmosphere is kept around the Earth.

....



19. The Sun appears larger and brighter than other stars.

....

20. Atmosphere limits the using of some telescopes to see distant celestial bodies.

....

21. Stars appear bright in the sky at night.

....

22. Occurrence of seasons on Earth.

....

23. Moon has different phases during its rotation around lunar month

....

24. Although Earth rotates on its axis, we don't feel its movement.

....

Question 07 — What happens if .... ?

1. Plants can't get carbon dioxide gas from air.

....

2. The egg of a frog if it lays its eggs in a river instead of a pond.

....

3. The state of water when it is subjected to extreme cold weather.

....

4. Fresh water of a river when it meets the salt water of a sea.

....

5. Aquatic organisms eat pieces of plastics instead of their real food.

....

6. We compare the rainforest biome with the desert biome.

....

7. Animals that live in lakes if they dry up.

....

8. The state of water when it is subjected to extreme hot weather.

....

9. People don't conserve fresh water.

....

10. Water is collected in a low-lying area.

....

11. The quality of fresh water becomes poor.

....

12. The river water meets the sea water.

....

13. The rate of rainfall increases on a river.

....

14. The gravity of the Sun if its mass decreases than it is now.

....

15. A metal ball and feather are fallen down from a tower.

....

16. The planets if the Sun has no gravity.

....

17. There is no gravity on Earth.

....

18. The distance between the moon and Earth increases to twice.

....

19. The mass of the moon decreases to half.

....

20. Earth stops spinning on its axis.

....

21. The shadow of an object if the Sun locates at east or west in the sky

....

22. Stars are not made up of hot gases.

....

23. The Sun moved farther away from Earth.

....

24. The moon completes one revolution around Earth

....

Question 08 cross the odd word

1. Water – oxygen – nitrogen – carbon dioxide.
2. Rivers – rainwater – gulfs – groundwater
3. Streams – Ponds – Rocks – Rivers
4. Water – sand – soil – rocks
5. Ponds – oceans – rains – glaciers
6. Nile River – Ocean – Lake Assal – Sea.
7. Crescent – full moon – earth – new moon

Question 09 Complete the following using words between brackets



[fresh – clouds – crust – salt – mantle – raining]

1. The Earth consists of 4 layers which are the ...., the ....and outer and inner core.
2. Most lakes have ....water, while some other lakes have ....water.
3. During the water cycle in nature, water evaporates forming ...., then it returns back to the Earth's surface during ....

2

[Hydrosphere– low – aquatic organisms – sunlight – high – water – wind – biosphere – saltwater]

1. Intertidal zone is the area along the ocean between the ....tide and ....tide.
2. Rainwater is needed for plant growth, this is an interaction between two Earth's spheres which are ....and ....
3. Tiny particles of plastic enter food chains when ....eat them.
4. Sea waves, ...and ....break down plastic materials into smaller particles.
5. Hydrologists study the movement of ....across the Earth.

3

[filter – sand – harmful –valleys - drought – charcoal- deltas – solid – decrease]

1. When the rate of rainfall decreases, the level of water in rivers will ....causing ....
2. Human can ....water to recycle wastewater to be used again.
3. Water filters are used to remove ....materials from polluted water.
4. Cotton, ...and ....can be used in making a simple water filter.
5. Glaciers are sources of fresh water which have a .... state of matter.
6. When the speed of water stream becomes high, it can erode deep ...., while when speed of water becomes low it can form ....

4

[Solar system – gravity - Earth – friction - air resistance – constant – magnetism]

1. A parachute in air is affected by ....that acts against the ....force of Earth.
2. The Sun locates at the center of . ...
3. The moon moves around ....due to gravity.
4. Magnet can attract some objects by a force called ....
5. Air resistance is a type of ....force.
6. Law of motion states that the force of gravity is.. .... and acts on all objects in the same way.

5

[Earth's revolution – axes – center of the sky – speed – axis - Earth]

1. The planets of the solar system rotate on their ....at different ....
2. The orbiting of the Earth around the Sun is called ....while the spinning of Earth on its ....is called rotation.
3. In early morning the Sun appears in .... while at noon it appears in ....

Question 10 Match

1

	(A)		(B)
1	Geosphere	a	Contain mixture of fresh water and salt water.
2	Atmosphere	b	Contain salt water only.
3	Oceans	c	Contain rocks and heavy metals.
		d	Contain oxygen and nitrogen gases

2

	(A)		(B)
1	Shallow areas of oceans	a	humans
2	The word 'Bio' refers to	b	Contain coral reefs
3	Abyssal areas of oceans	c	water
4	The word 'hydro' refers to	d	Don't receive sunlight

3

(A)		(B)	
1	Oceans	a	Contain fresh water or salt water.
2	Lakes	b	Contain salt water only.
3	Rivers	c	Contain mixture of fresh water and salt water.
4	Estuary	d	Contain fresh water only

4

(A)		(B)	
1	Mosses	a	Earth
2	Dolphins	b	Live in fresh water
3	The word 'Geo' refers to	c	Live in salt water

5

(A)		(B)	
1	Force	a	is a change of an object position due to a certain force.
2	Magnet	b	is the center of solar system.
3	The Sun	c	Attracts metals objects.
4	Motion	d	Is a push or pull that affects an object.

6

(A)		(B)	
1	Jupiter	a	is the center of the solar system.
2	Earth	b	is the fastest planet on its axis
3	The Sun	c	is the planet that completes one cycle on its axis in 24 hours

Question 11 Answer The Following questions

1 Study the opposite figures then complete the following sentences:


Figure (1)

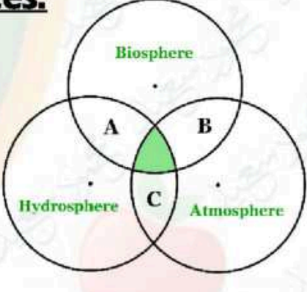

Figure (2)


Figure (3)


Figure (4)

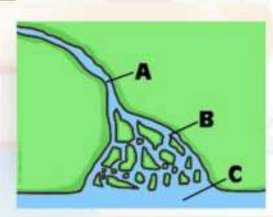
1. Figure (.....) is considered an interaction between hydrosphere and biosphere.
2. Figure (......) is considered an interaction between geosphere and biosphere.
3. Figure (......) is considered an interaction between atmosphere and biosphere.
4. Figure (......) is considered an interaction between atmosphere and geosphere.

2 Study the opposite figures then complete the following sentences:



1. Area (.....) represents evaporation of water.
2. Area (.....) represents a green plant release oxygen gas in the air.
3. Area (.....) represents an animal than drink from lake.

3 Study the opposite figures then complete the following sentences:

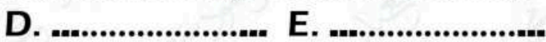


1. Water in area (........) is a mixture of salt and fresh water.
2. Water in area (........) is fast enough to carry sediments easily.
3. Water in area (.....) is fresh water while water is salty in area (......).

4 Study the opposite figures then answer the following questions:



1. What is the name of the following model?
   ....
2. What is the importance of this model?
   ....
3. Label the following Letters?
   A..................... B. .... C ....
   D. .... E. ....



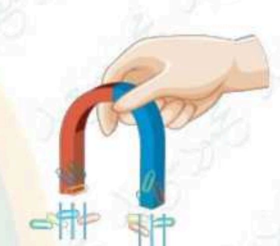
5 **Look at the opposite figure then choose the correct answer from those between brackets:**



1. The force that causes skydivers to move down is called ....
(gravity of Earth - gravity of moon - gravity of Sun)

2. When skydivers open their parachutes they are attracted to...............
(Earth's center - moon's surface - the sky)

6 **Look at the opposite figure then choose the correct answer.**



1. Which type of paper clips will attracted to magnet

(plastic paper clips – metal paper clips)

2. Magnet has a kind of............. Force .

(visible – invisible)

7 **Study the opposite figures then complete the following sentences:**

1. The following figure represents .... constellation.

(Orion – Scorpion)



2. Stars in constellation are .... to each other at all.

(Connected – not connected)

3. The position of Stars in constellation ....

(changes – doesn't change)

4. You can see different constellations in winter than in summer due to earth ....
(revolution – rotation)

انتهت الأسئلة مع اطيب الامنيات بالنجاح والتوفيق

الصف الخامس الابتدائي ٢٠٢٣

بنك أسئلة

المتميز

أ/ محمود سعيد

Model Answers

Science

second term final revision

5 الصف الخامس

BY

MRS .Alaa Hesham
MRS. Amira Ahmed


CARTOON SCIENCE

EL MOTAMYEZ - SCIENCE Questions Bank
FINAL REVISION

Question 01 Choose the correct answers

1. Which of the following is a part of the biosphere?
   (a) Ice (b) Clouds (c) Animals (d) Water
2. All the following are from sources of water on the Earth, except ....
   (a) aquifers (b) ponds (c) glaciers (d) molten rocks
3. Presence of dolphins in oceans represents an interaction between ....
   (a) biosphere – hydrosphere (b) hydrosphere – geosphere
   (c) hydrosphere – atmosphere (d) biosphere – geosphere
4. The amount of salt water on the Earth is ....the amount of fresh water.
   (a) larger than (b) smaller than (c) equal to (d) half
5. All the following are saltwater lakes, except ....
   (a) Lake Assal (b) Lake Nasser (c) Lake Idku (d) Lake Bardawil
6. Rocks are broken down into smaller particles during .... process.
   (a) photosynthesis (b) weathering (c) erosion (d) respiration
7. Catfish can survive in ....water environment.
   (a) salt and still (b) fresh and fast (c) salt and current (d) fresh and still
8. Mosses fish are found in ....
   (a) lakes (b) Lake Burullus (c) streams (d) ponds
9. Most of fresh water on Earth is found in the form of ....
   (a) groundwater (b) rivers (c) glaciers (d) streams
10. Insects lay their eggs in systems that are found in ....
    (a) streams (b) ponds (c) sea (d) rivers
11. Weathering of rocks by water indicates an interaction between ....
    (a) hydrosphere and geosphere (b) biosphere and hydrosphere
    (c) biosphere and atmosphere (d) atmosphere and hydrosphere
12. The Earth's system which contains mountains is ....
    (a) atmosphere (b) geosphere (c) biosphere (d) hydrosphere
13. The number of Earth's layers that form geosphere is ....layers.
    (a) two (b) four (c) six (d) eight

14. Water covers nearly ....of the Earth planet.

ⓐ 1/4 ⓑ 1/2 ⓒ 1/5 ⓓ 3/4

15. By heating of water it changes from ......state to ....state.

ⓐ solid – liquid. ⓑ liquid – solid ⓒ liquid – gas ⓓ gas – liquid

16. Water is used in all the following purposes, except ....

ⓐ recreation ⓑ burning ⓒ bathing ⓓ manufacturing

17. At the beginning of water cycle in nature, water ....and goes into the air forming ....

ⓐ freezes – snow. ⓑ evaporates – clouds. ⓒ freezes – clouds ⓓ evaporates – snow.

18. Aquatic ecosystems can be classified into ....ecosystem and .....ecosystem.

ⓐ forest – desert. ⓑ savannah – tundra ⓒ grassland – rainforest. ⓓ freshwater – saltwater.

19. All the following factors affecting the breakdown of plastics into microplastics, except................

ⓐ sunlight ⓑ moon ⓒ wind ⓓ sea waves.

20. All the following materials can be used to filter wastewater in simple water filter, except ....

Next Concept

ⓐ cotton ⓑ wood ⓒ charcoal ⓓ sand

21. Which of the following is found between pores of rocks below Earth's surface?

ⓐ ice ⓑ groundwater ⓒ oceans ⓓ water vapour

22. Sand, charcoal and cotton can be used to remove all the following materials from wastewater, except ....

ⓐ small pieces of plastic ⓑ salt dissolve in water ⓒ small particles of mud ⓓ small pieces of rocks

23. Humans can use water in all the following purposes, except ....

ⓐ fishing ⓑ transportation ⓒ generating electricity ⓓ weathering of rocks

24. Among the kinds of wetlands are ....

ⓐ swamps and lakes. ⓑ marshes and bogs. ⓒ ponds and oceans. ⓓ swamps and estuaries.

25. Seas and oceans water meet rivers water at ....

ⓐ watershed ⓑ estuary ⓒ surface canal ⓓ underground

26. There are many concerns that threaten lots of water areas on Earth such as

ⓐ scarcity and poor quality. ⓑ sustainability and poor quality

ⓒ poor quality and availability ⓓ availability and quality

27. ....are formed when water collects in low-lying areas.

ⓐ Seas ⓑ Lakes ⓒ Rivers ⓓ Oceans

28 The natural resource which is important to the survival of all living organisms is ....

a soil b oil c water d grass

29 The level of water in a river may increase causing flooding, when there is more

a rainfall b wind c sunlight d sediments

30 The moon revolves around Earth under the effect of ....

Next Concept

a Sun gravity b Earth gravity c rotation of Earth on its axis d movement of the moon around Earth

31 As the mass of the object increases, ...increases.

a its movement b its force c its gravity d its illumination

32 If the distance between the moon and Earth is doubled, the force of gravity ....between them.

a increases b vanishes c decreases d doesn't change

33 Object moves under the effect of ....forces.

a pull and push b pull and drag c revolving and push d pull and attraction

34 Magnet attracting paper clips is an evidence that magnet .....

a needs force b has a force c loses force d gains force

35 If the moon's mass is doubled, ...

a its distance away from Earth is doubled
b the moon may collide with Earth
c it attracts Earth
d it goes away from Earth

36 The friction force between objects usually acts on slowing down their motion, this is because that force ....

a acts in the same direction of their motion.
b acts with their motion in their strength and direction.
c acts in opposite direction to their motion.
d increases their motion in the opposite direction.

37 When throwing an object up, it ....

a returns again to Earth under effect of gravity.
b floats in space because there is no gravity.
c clings (suspended in air) because its gravity is equal to that Earth.
d moves fast towards space.

38 A force that is created between two attached surfaces leading to slow movement is called ....force.

a pushing b dragging c friction d pulling

39 The force affecting the moon to orbit the Earth is ....

a Earth gravity b Sun gravity c moon gravity d Earth magnetism

40 Parachute helps in ....

- a) increasing the velocity of object falling to the ground
- b) slowing down the velocity of object falling to the ground
- c) decreasing the air resistance against the falling object
- d) increasing the drag of object in the direction of gravity

41 Magnet has the force of attracting metals such as ....

- a) iron and nickel
- b) aluminium and copper
- c) silver and gold
- d) aluminium and silver

42 A table stands on the ground needs ....to move.

- a) sunlight
- b) mass
- c) force
- d) air

43 Which of the following objects has the least attraction force?

Next Concept

- a) The moon
- b) The Earth
- c) The Sun
- d) The magnet

44 The idea of sundial depends on ....

- a) formation of shadows
- b) rotation of object around its axis
- c) the apparent movement of the sun
- d) falling of objects under the effect of gravity

45 Planets continue revolving around the sun in fixed orbits under the effect of

- a) Earth gravity
- b) Sun gravity
- c) Planets gravity
- d) Moon gravity

46 Succession of day and night is due to ....

- a) revolution of the moon around the Earth.
- b) revolution of the Earth around the Sun.
- c) rotation of the moon on its axis.
- d) rotation of the Earth on its axis.

47 At midday, the sun is located ....

- a) from your right side
- b) from your left side.
- c) above your head.
- d) in front of you.

48 The reason of seeing the apparent movement of the stars at night, although they are not changing their locations ......

- a) the rotation of the moon on its axis.
- b) the apparent motion of the sun every day.
- c) rotation of Earth on its axis in front of the sun.
- d) revolution of Earth in an elliptical orbit around sun.

49 Heat and light energies of the sun result from ....

- a) explosion of the extremely hot gases inside the sun.
- b) the apparent of the sun motion daily.
- c) revolution of Earth in an elliptical orbit around the sun.
- d) revolution of the moon around Earth in front of the sun.

50 Stars 'illumination and shinning in the sky is considered evidence that ...

- a) they are composed of extremely hot gases.
- b) they are under the effect of sun gravity.
- c) they belong to our solar system.
- d) they are from the followers of the sun.



51 Planets of the solar system revolve in fixed orbits under the effect of gravity of ....

Earth (b) Sun (c) Moon (d) Jupiter

52 If the gravity between the sun and planets of solar system is vanished (disappear) , this will lead to ....

(a) planets will move directly towards the sun. (b) planets will attract to each other.

(c) planets will float into space. (d) planets will explode under the effect of their gravities.

53 We can see thousands of ....in the sky at night that give off heat and light.

(a) moons (b) stars (c) planets (d) satellites

54 Our solar system contains ....

(a) one star (b) one planet (c) one moon (d) no stars

55 We cannot send astronauts to study stars because they are ....

(a) so cold (b) faraway (c) too small (d) too large

56 The moon takes one lunar........... to complete one cycle around the Earth.

(a) year (b) week (c) month (d) day

57 At the beginning of lunar month we can see the edge of the moon is illuminated at..................... phase.

(a) crescent (b) gibbous (c) full moon (d) new moon

58 ....locate(s) at the center of our solar system.

(a) The moon and the Sun. (b) The moon and the Earth. (c) The Sun only. (d) The Earth only.

59 The Sun is a star that gives out a very big amount of ....

(a) heat only. (b) light only. (c) heat and light (d) heat and sound.

Question 02 PUT (√) OR (×)

1. Microplastics are large plastic pieces which can harm oceans and aquatic life. ✗
2. If there is no hydrosphere, the biosphere will not exist. ✓
3. Wells and springs obtain their water from aquifers. ✓
4. We can drink the water of Lake Assal. ✗
5. Water makes about two-thirds of human body. ✓
6. There are no living organisms live in the hydrosphere. ✗
7. We cannot drink the water of seas ✓
8. A river always flows from an area of low place to an area with higher place ✗





No.	Statement	Answer
9	Leeches live on the surface of pond water	✗
10	Earth's systems interact with each other.	✓
11	Waterfalls are part of atmosphere.	✗
12	Atmosphere and hydrosphere affect water cycle.	✓
13	A glacier contains mixture of fresh water and salt water	✗
14	Lakes have fresh water only.	✗
	Next Concept	
15	Cotton can be used as a filter to remove waste materials from water.	✓
16	Valleys can be formed by rivers due to fast movement of river's water.	✓
17	Some human activities are responsible for water pollution	✓
18	Building factories is from human strategies to control and conserve fresh water.	✗
19	Dams can be used to filter polluted water to use again	✗
20	You can conserve water by leaving the tap open during brushing your teeth	✗
21	Upstream is the place where a river starts.	✓
22	The type of water in wetlands is salt water only.	✗
23	High quality of fresh water leads to the death of marine organisms live in it.	✗
24	Scarcity and conservation of fresh water are two main risks that threaten fresh water on Earth	✗
25	All living organisms need water to survive.	✓
26	Generating electricity is from the uses of water.	✓
27	When fresh water is polluted, it becomes drinkable.	✓
	Next Concept	
28	Earth revolves around the sun in a fixed path.	✓
29	All objects on Earth's surface are affected by magnetism force.	✗
30	Magnetism is the force that attracts metals.	✓
31	Any object on Earth's surface is affected by repulsion force of gravity	✗
32	The orbit of each planet has an elliptical shape.	✓
33	Air resistance is a factor that speeds up the falling objects toward the Earth.	✗
34	Gravity pulls objects toward the centre of Earth	✓
35	The scientist Nicolaus Copernicus stated that Earth revolves around the Sun.	✓





36 There is no air in space, so air resistance slows down the movement of objects through space. ✗

37 Air resistance is a type of pulling force. ✓

38 The direction and mass of an object are changed due to gravity. ✗

39 After leaving a squeezed spring, it has no force to return back to its original state. ✗

Next Concept

40 The moon phases occur due to the rotation of Earth on its ✗

41 We can observe the Sun and the moon at night. ✗

42 At the beginning of the day, the Sun appears in the west direction ✗

43 Our solar system contains eight planets. ✓

44 The scientist Copernicus proved that the Earth is the center of the solar system. ✗

45 The moon has only one phase during the lunar month. ✗

46 Superhot gases of the Sun burn producing heat and light energies. ✓

47 Earth's revolution around the Sun causes day and night phenomenon ✗

48 The Sun is necessary for continuity of life on Earth. ✓

49 The cycle of the moon phases repeated at the beginning of lunar month . ✓

Question 03 — Complete the following sentences using words between brackets

1. A rat that digs a burrow in the soil is an example of the interaction between biosphere and .... [hydrosphere – geosphere]
2. The Earth's system that includes all living organisms is called .... [biosphere – atmosphere]
3. Water runs across the land is an example of an interaction between ....and geosphere. [biosphere – hydrosphere]
4. When a river meets a sea, ...is formed. [estuary – lake]
5. The large sheet of ice or snow that moves slowly over Earth's surface is known as .... [glaciers – hydrosphere]
6. The scientists who study water on Earth are called .... [hydrologists – astronauts]
7. Water is responsible for weathering and ....of rocks. [evaporation – erosion]
8. Abyssal zone in the ocean is a dark area as...........cannot reach it. [sunlight – sound]
9. Starfish and Moses fish live in .... [oceans – ponds]

(10) The amount of fresh water on Earth is ....than the amount of salt water. [more – less]

(11) 97% of Earth's water is .... [freshwater – saltwater]

Next Concept

(12) In high Dam, water used to generate ...... [electricity – light]

(13) The run out of ....causes wells to become dry. [groundwater – runoff]

(14) We must take a quick shower to conserve ...,.. [saltwater – freshwater]

(15) To conserve water, we can ....the time of washing our hands. [increase – decrease]

(16) Some human activities may cause water .... [erosion – pollution]

(17) An area of land where all the water flows to a common location is called .... [lake – watershed]

(18) Deltas are formed by the deposit of sediments at the end of .... [underground – river]

(19) The extinction of some species that live in fresh water is due to the poor ....of fresh water. [quality – source]

(20) When the water is stored in the cracks and spaces of underground rocks, ...is formed. [estuary – groundwater]

(21) The land that is partially covered with water is called .... [wetland – lake]

(22) Human can ....water to recycle wastewater to be used again. [freeze – filter]

(23) Clear water can be polluted if it is mixed with .... [mud – salt]

(24) Groundwater is replaced by .... [air – rains]

(25) The direction of the Earth's gravity is always toward ....of the Earth. [poles – center]

(26) Any object has ......depending on its mass. [gravity – work]

(27) Planets revolve around the Sun in ....orbit. [triangular – elliptical]

(28) The force of gravity is always ......force. [magnetic – pulling]

(29) The force that opposes the movement of objects as they pass through air is called .... [air resistance – gravity]

(30) The force that slows down the movement of objects across solids, liquids or gases is called .... [magnetism – friction]

(31) When a girl moves down a slide, this is due the force of .... [moving – gravity]

(32) Without the force of gravity, the moon would ....off into space. [sink – float]

33 Earth is pulling the moon, keeping it in its ....around Earth. [orbit – circle]

34 Magnetism is a force that attracts .... objects. [metal – non-metal]

35 Force may be push or ....the object to make it move. [pull – repel]

36 The gravity of the Moon affects the phenomenon of ocean .... [waves – tides]

37 A person can control the speed of his bike by using ....to slow down its movement. [magnet – brakes]

Next Concept

38 When the distance between the moon and the Earth increases, the gravitational attraction between them .... [increases – decreases]

39 The group of stars that make a certain shape in the sky is called .... [constellation – Sun]

40 The Earth spins around its axis once every ... [30 days – 24 hours]

41 The half of Earth that doesn't receive any light has...[day – night]

42 The fastest planet on its axis is ...... [Earth – Jupiter]

43 Ancient Egyptians used .... to know the time. [sunset – sundial]

44 Constellation ..... is one of the most famous constellations in the sky. [Orion – Milky Way]

45 The Sun appears as it rises in east direction and sets in ....direction. [north – west]

46 In the early morning the Sun would be at ....direction. [east – south]

Question 4 — Write scientific term for each of the following

1. A type of water which represents 3% of water area on the Earth's surface — freshwater
2. The process in which the small particles of rocks are transported from a place to another — erosion
3. Areas of the ocean which contain coral reefs and intertidal zones. — shallow areas
4. The frozen water part of the hydrosphere. — Cryosphere
5. The plastic particles that result from the breakdown of large plastics. — microplastics
6. The water bodies that surround the continents. — oceans
7. It is a system that includes all living organisms such as microorganisms, plants, animals and humans — biosphere



8	It is a system that includes all the gases that surround the Earth.	atmosphere
9	They are very deep areas in oceans that sunlight cannot reach.	Abyssal areas
10	It a large region of the world that has similar soil, climate, plants and animals.	biome
11	A cycle shows the continuous movement of water from the Earth to the atmosphere then to the Earth again.	water cycle
12	The area of the coast that disappears underwater at the high tide and appears at the low tide.	intertidal zone
13	The process of breaking down of rocks into smaller particles due to the effect of wind , water or temperature.	weathering
14	A water body that is surrounded by land	Lake
Next Concept		
15	A type of pollution which occurs as a result of throwing waste in rivers and seas	water pollution
16	A triangular shaped area of mud and other sediments that forms when a river meets a sea	delta
17	It is an area of land where all the water flows to a common location usually an ocean, a sea or other large water bodies	watershed
18	It is a land area which is partially covered with water	wetland
19	The large water body that is surrounded by land	Lake
20	A building established across a river which can hold water behind it.	Dam
21	The type of water which is found in seas and oceans	saltwater
22	A type of water which is suitable for drinking.	freshwater
Next Concept		
23	The force of attraction that changes the direction of a moving object in air towards the ground	Gravity
24	It is a pull or push that affects an object	Force
25	An invisible force that attracts metal objects to the magnet.	magnetism
26	The Sun and eight planets revolving around it.	solar system
27	A phenomenon takes place in oceans and seas due to the gravity of the moon	ocean tides
28	The force that slows down the movement of objects through air.	air resistance
29	The tool that is used by skydivers to slow his drop.	Parachutes
30	A celestial body that orbits the Earth	The Moon



31	The change of an object position when force acts on it.	Motion
32	The force between two objects that don't touch each other	Non-contact force
33	The force between two objects that touch each other	Contact force
34	They are giant spheres of superhot gases most of them are hydrogen and helium.	Stars
35	A dark object that revolves around Earth and reflects the sunlight falling on its surface	The Moon
36	An imaginary line that passes through the two poles of Earth.	Earth's axis
37	The sun and eight planets revolving around it.	Solar system
38	It is a group of stars, planets and gases held together by gravity.	Galaxy
39	The law which states that the force of gravity is constant and acts on all object in the same way.	Law of Motion
40	The orbiting of Earth around the Sun	Earth's revolution
41	It is a medium-sized star that provides Earth with heat and light	The Sun
42	The dark celestial bodies that revolve around the Sun in fixed orbits	The planets
43	A constellation appears in the sky as a mythical hunter.	Constellation Orion

Next Concept

Question 5 — correct the underlined word

1	During the water cycle, water evaporates forming <u>rains</u>.	water vapour
2	When rain falls on soil, this represents an interaction between <u>biosphere</u> and geosphere	hydrosphere
3	Nitrogen in the air is a part of <u>geosphere</u>.	Atmosphere
4	As water covers ¾ of the Earth's surface, our planet appears in <u>white</u> colour from space	blue
5	When the fresh water of a river meets the salt water of a sea, <u>runoff</u> is formed.	an estuary
6	During the water cycle in nature, water evaporates forming <u>rains</u>	clouds
7	The <u>atmosphere</u> includes all forms of water on Earth.	hydrosphere
8	Frogs lay their eggs in <u>running</u> water, so the eggs will not move away	still
9	Throwing waste materials in seas and oceans causes <u>air</u> pollution	water

10	Fresh water forms about 97% of water on Earth.	3%
11	Planets orbit Earth due to the gravity between them	Sun
12	Earth pulls objects towards its moon	center
13	The gravity of the Sun affects the ocean tides	moon
14	The gravity force of Earth to a person in a flying airplane is equal to that when the same person stands on the ground	less than
15	The Earth locates at the center of the solar system	Sun
16	The planets revolve around the Sun in fixed rectangular orbits	elliptical
17	Earth attracts the Sun to move around it.	Moon
18	If the mass of the moon decreases, its gravity force will increase.	increases
19	The Sun forms the shorter shadow of an object at the morning.	noon
20	The Earth spins around its axis once every 20 hours.	24
21	Constellation consists of a group of planets that form a pattern	stars
22	Every night, new stars appear from west.	east
23	Jupiter revolves around the Sun in a rectangular orbit	oval
24	The phenomenon of four seasons occurs due to rotation of Earth on its axis.	day and night
25	First phase of moon phase appears at the beginning of each lunar month	first crescent
26	Phase of moon which appears in the half of the lunar month	full moon
27	Phase of moon which appears in the last day of the lunar month	New moon
28	The moon phase at which moon seems completely dark	New moon

Question 06 — Give reason for each of the following

1. Not every water sources is used as drinking water.
   because humans cannot drink salt water but they drink fresh water only
2. No green plants can survive in the abyssal zones of oceans.
   because the abyssal zones don't receive sunlight that important for making food in plant by photosynthesis process
3. Mosquitoes lay their eggs in ponds.
   because ponds have still water so the eggs will not move away



4. Our planet looks like a blue marble from the space.
because more than 70% of Earth is covered by water
5. Some ponds and lakes may dry up during some months.
because when temperature increases in summer, water evaporates faster
6. Hiding of ants inside the soil is an example of an interaction between two Earth's spheres
because ants belong to biosphere and soil belongs to geosphere
7. The kind of water in oceans differs from that in rivers.
because oceans contain salt water while rivers contain fresh water
8. Recycling the plastic bottles is better than throwing them in seas and oceans.
because plastic pollutes water and affects the survival of aquatic organisms
9. More than 50% of known living organisms live in the aquatic environments.
because water covers about 70% of Earth's surface
10. Scientists tend to preserve freshwater sources on Earth.
because the amount of fresh water is limited on Earth
11. Groundwater is called by this name.
because it is stored in the cracks and spaces of rocks
12. Deltas are formed at the river's end.
because when river's water slows down, sediments are deposited at river's endpoint forming deltas
13. The quality of fresh water affects the life of living organisms live in it.
because it leads to death of thousands of living organisms and extinction of some species live in this water
14. The force of gravity has an important role in the solar system.
because it keeps the planets revolving around the Sun in fixed orbits
15. Gravity of Earth is greater than gravity of the moon.
because the mass of Earth is more than the mass of moon
16. A metallic ball reaches Earth's surface before a feather when they fall from the same place at the same moment.
because air resistance affects the feather more than the metallic ball
17. The moon moves around the Earth.
due to the gravitational force between them
18. The atmosphere is kept around the Earth.
due to the Earth's gravity
19. The Sun appears larger and brighter than other stars.
because the Sun is the closest star to the Earth

20 Atmosphere limits the using of some telescopes to see distant celestial bodies.
because atmosphere allows some light waves to pass to Earth and it blocks others

21 Stars appear bright in the sky at night.
because stars produce light

22 Occurrence of seasons on Earth.
Due to revolution of Earth around the Sun

23 Moon has different phases during its rotation around lunar month
Because moon revolves around the earth in an elliptical orbit

24 Although Earth rotates on its axis, we don't feel its movement.
because we are moving with the same speed of Earth

Question 07 What happens if .... ?

1 Plants can't get carbon dioxide gas from air.
plants can't make their food by photosynthesis process

2 The egg of a frog if it lays its eggs in a river instead of a pond.
the eggs will move away with the running water of the river

3 The state of water when it is subjected to extreme cold weather.
it will change into solid state (ice)

4 Fresh water of a river when it meets the salt water of a sea.
an estuary is formed

5 Aquatic organisms eat pieces of plastics instead of their real food.
aquatic organisms get harmed

6 We compare the rainforest biome with the desert biome.
climate, plants and animals are different in the two biomes

7 Animals that live in lakes if they dry up.
they have to adapt or they will die

8 The state of water when it is subjected to extreme hot weather.
It changes from liquid to gas

9 People don't conserve fresh water.
the amount of fresh water on the Earth will decrease

10 Water is collected in a low-lying area.
A lake is formed

11 The quality of fresh water becomes poor.
it leads to death and some species extinct

12 The river water meets the sea water.
An estuary is formed
13 The rate of rainfall increases on a river.
The level of water in this river will increase causing flooding
14 The gravity of the Sun if its mass decreases than it is now.
The gravity of the Sun will decrease
15 A metal ball and feather are fallen down from a tower.
The metal ball will reach the ground first
16 The planets if the Sun has no gravity.
they will float off into space
17 There is no gravity on Earth.
All objects on its surface will float off into space
18 The distance between the moon and Earth increases to twice.
the gravitational attraction between them would become smaller
19 The mass of the moon decreases to half.
The moon would have less gravity
20 Earth stops spinning on its axis.
Day and night phenomenon will not happen
21 The shadow of an object if the Sun locates at east or west in the sky
The shadow will be the longest
22 Stars are not made up of hot gases.
they will not give their own light and seem dark bodies
23 The Sun moved farther away from Earth.
The thermal and light energy that reach to Earth will decrease
24 The moon completes one revolution around Earth
The phases of the moon are repeated

Question 08 cross the odd word

1. Water – oxygen – nitrogen – carbon dioxide. water
2. Rivers – rainwater – gulfs – groundwater gulfs
3. Streams – Ponds – Rocks – Rivers Rocks
4. Water – sand – soil – rocks water
5. Ponds – oceans – rains – glaciers oceans
6. Nile River – Ocean – Lake Assal – Sea. Nile River
7. Crescent – full moon – earth – new moon Earth

Question 09 Complete the following using words between brackets



[fresh – clouds – crust – salt – mantle – raining]

1. The Earth consists of 4 layers which are the ...crust.., the ...mantle...and outer and inner core.
2. Most lakes have ......fresh.......water, while some other lakes have ......salt.......water.
3. During the water cycle in nature, water evaporates forming ....clouds...., then it returns back to the Earth's surface during ......raining......



[Hydrosphere– low – aquatic organisms – sunlight – high – water – wind – biosphere – saltwater]

1. Intertidal zone is the area along the ocean between the ......high.....tide and ......low.....tide.
2. Rainwater is needed for plant growth, this is an interaction between two Earth's spheres which are ...hydrosphere...and ......biosphere.......
3. Tiny particles of plastic enter food chains when ...aquatic organisms......eat them.
4. Sea waves, ...wind....and ...sunlight...break down plastic materials into smaller particles.
5. Hydrologists study the movement of ...water.....across the Earth.

3

[filter – sand – harmful –valleys - drought – charcoal- deltas – solid – decrease]

1. When the rate of rainfall decreases, the level of water in rivers will ...decrease....causing ......drought.....
2. Human can ...filter.....water to recycle wastewater to be used again.
3. Water filters are used to remove ...harmful.....materials from polluted water.
4. Cotton, ...charcoal....and .....sand.......can be used in making a simple water filter.
5. Glaciers are sources of fresh water which have a ...solid... state of matter.
6. When the speed of water stream becomes high, it can erode deep ...valleys...., while when speed of water becomes low it can form ...deltas......

4

[Solar system – gravity - Earth – friction - air resistance – constant – magnetism]

1. A parachute in air is affected by .....air resistance ......that acts against the ......gravity.....force of Earth.
2. The Sun locates at the center of .....Solar system.....
3. The moon moves around ......Earth........due to gravity.
4. Magnet can attract some objects by a force called ....magnetism........
5. Air resistance is a type of ....friction........force.
6. Law of motion states that the force of gravity is..constant.. and acts on all objects in the same way.

5

[Earth's revolution – axes – center of the sky – speed – axis - Earth]

1. The planets of the solar system rotate on their axes at different speeds .
2. The orbiting of the Earth around the Sun is called .....Earth's revolution....., while the spinning of Earth on its ....axis.....is called rotation.
3. In early morning the Sun appears in the center of the sky while at noon it appears in Earth.

Question 10 Match

1

(A)		(B)		
1	Geosphere	a	Contain mixture of fresh water and salt water.	1 - c
2	Atmosphere	b	Contain salt water only.	2 - d
3	Oceans	c	Contain rocks and heavy metals.	3 - b
		d	Contain oxygen and nitrogen gases	

2

(A)		(B)		
1	Shallow areas of oceans	a	humans	1 - b
2	The word 'Bio' refers to	b	Contain coral reefs	2 - a
3	Abyssal areas of oceans	c	water	3 - d
4	The word 'hydro' refers to	d	Don't receive sunlight	4- c

3

(A)		(B)		
1	Oceans	a	Contain fresh water or salt water.	1 - b
2	Lakes	b	Contain salt water only.	2 - a
3	Rivers	c	Contain mixture of fresh water and salt water.	3 - d
4	Estuary	d	Contain fresh water only	4- c

4

(A)		(B)		
1	Mosses	a	Earth	1 - b
2	Dolphins	b	Live in fresh water	2 - c
3	The word 'Geo' refers to	c	Live in salt water	3 - a

5

(A)		(B)		
1	Force	a	is a change of an object position due to a certain force.	1 - d
2	Magnet	b	is the center of solar system.	2 - c
3	The Sun	c	Attracts metals objects.	3 - b
4	Motion	d	Is a push or pull that affects an object.	4- a

6

(A)		(B)		
1	Jupiter	a	is the center of the solar system.	1 - b
2	Earth	b	is the fastest planet on its axis	2 - c
3	The Sun	c	is the planet that completes one cycle on its axis in 24 hours	3 - a

Question 11 Answer The Following questions

1 Study the opposite figures then complete the following sentences:

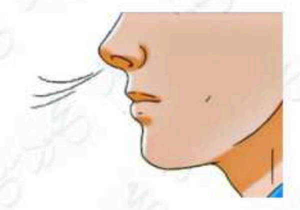

Figure (1)

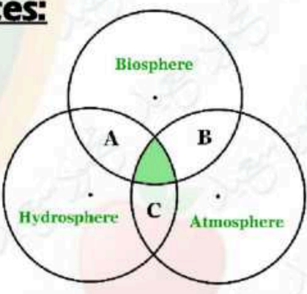

Figure (2)


Figure (3)


Figure (4)

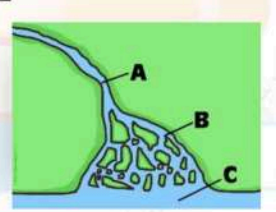
1. Figure (...3..) is considered an interaction between hydrosphere and biosphere.
2. Figure (...2...) is considered an interaction between geosphere and biosphere.
3. Figure (...1...) is considered an interaction between atmosphere and biosphere.
4. Figure (...4...) is considered an interaction between atmosphere and geosphere.

2 Study the opposite figures then complete the following sentences:



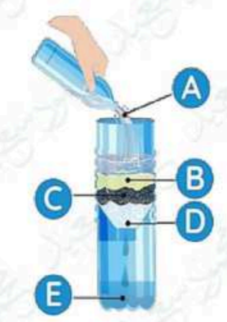
1. Area (..C...) represents evaporation of water.
2. Area (...B..) represents a green plant release oxygen gas in the air.
3. Area (..A...) represents an animal than drink from lake.

3 Study the opposite figures then complete the following sentences:



1. Water in area (...B.....) is a mixture of salt and fresh water.
2. Water in area (...A.....) is fast enough to carry sediments easily.
3. Water in area (...A..) is fresh water while water is salty in area (...C...).

4 Study the opposite figures then answer the following questions:



1. What is the name of the following model?
   .... water filter.......................................
2. What is the importance of this model?
   ....remove waste materials from water ....
3. Label the following Letters?
   A... dirty water... B. ....sand......... C. ..charcoal
   D. ......cotton balls......... E. ...filtered water......

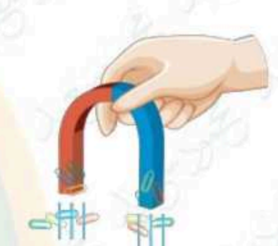
5 **Look at the opposite figure then choose the correct answer from those between brackets:**



1. The force that causes skydivers to move down is called ....
(gravity of Earth - gravity of moon - gravity of Sun)

2. When skydivers open their parachutes they are attracted to...............
(Earth's center - moon's surface - the sky)

6 **Look at the opposite figure then choose the correct answer.**



1. Which type of paper clips will attracted to magnet
(plastic paper clips – metal paper clips)

2. Magnet has a kind of............ Force .
(visible – invisible)

7 **Study the opposite figures then complete the following sentences:**

1. The following figure represents .... constellation.
(Orion – Scorpion)



2. Stars in constellation are .... to each other at all.
(Connected – not connected)

3. The position of Stars in constellation ....
(changes – doesn't change)

4. You can see different constellations in winter than in summer due to earth ....
(revolution – rotation)

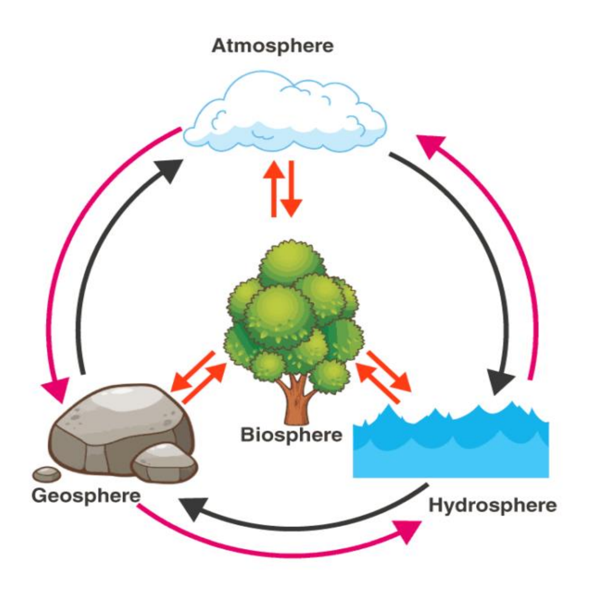
تم بحمد الله

بسم الله الرحمن الرحيم " إِنَّ الَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ إِنَّا لَا نُضِيعُ أَجْرَ مَنْ أَحْسَنَ عَمَلًا " صدق الله العظيم

Prim 5

Final revision sheet

((unit 3)) Concept 1



Scientist have divided the earth into main four systems: -

1- geosphere
2- atmosphere
3-biosphere
4- hydrosphere

First: - (hydrosphere)

It's the system that includes all of water on, under and above earth.

- Water is important for all living organisms as it founds everywhere in rivers, lakes, oceans, seas and underground
- Nearly 3/4 (70%) of the earth is covered with water, so the earth looks like a blue marble from the atmosphere. **G.R**
- Water bodies can change from liquid state to: -
  * Solid state by freezing which found in glaciers that form cryosphere
  * Gas state by evaporation
  So, the total amount of water doesn't change from one state to anther
  Water bodies exists in: - salt water (97%) and fresh water (3%)
  (1)Oceans, gulf & seas: very large bodies contain salt water
  (2)lakes: it surrounds by land, most of them fresh and some are salts
  (3)rivers: come from high altitude to low altitude, contains fresh water
  (4)estuary: it's the location on which fresh water of river meet the salt water of seas
  (5)Runoff: formed from water of rains or melting snow of the two poles
  (6)Underground: which forms the aquifer fresh water and Underground water supplies wells and sprains with water
- Water is important for life of living organisms: - **G.R**
  Bec,1-human drink water to survive, food, bathing, cleaning dish, recreation, travelling, manufacturing

2-plants need water to grow as it makes photosynthesis process to survive and affected by decrease of water or its pollution

3-some animals and plants live in water



- Water renewable resource of energy **G.R**

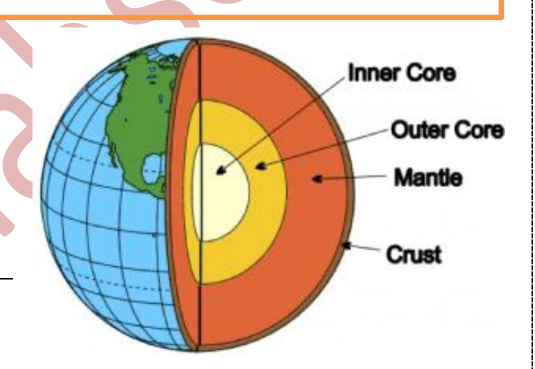
Due to water recycle as water evaporate to form clouds which fall again during rain

Second: - (Geosphere)

"It's the system that includes all the layers of earth which are the crust the mantle and inner and outer core" means earth

This system consists of: -

Rocks, minerals, soil, molten rocks (inside earth), heavy, sand, landform which contains (mountain or valleys)



Third: - (Atmosphere)

"It's the system that includes all the gases that surrounding the earth " means air

This system consists of: oxygen, nitrogen, CO_2 and other gases



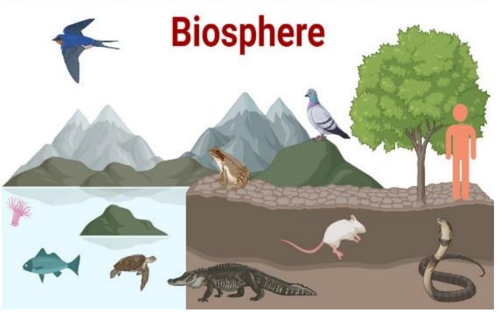
fourth :-(biosphere)

It's the system that includes all living organisms" means life

This system consists of:

All living organisms' as human, animals & plants.

Biosphere is any part of the earth that contains life, if it contains similar climate, plants, soil and sand it's called **Biome** as desert, forest, rainforest, grassland, wetland



Example for the interaction between the four system: -

Interaction between hydrosphere and geosphere	Causes: erosion of rocks and formation of lakes
Interaction between atmosphere and Biosphere	During photosynthesis plants take carbon dioxide and give out oxygen
Interaction between geosphere and biosphere	During photosynthesis process soil provides nutrients for plants root
During the interaction there is exchange of matter in each phenomenon	

Type of aquatic ecosystem: -

Salt water	Fresh water
Includes: - **A-oceans**. (running water as waves) (1) shallow areas of oceans contain the coral reefs and intertidal zones Intertidal zone is the area along the coast that disappear underwater at high tide and appears at low tide (2) deep areas of oceans is called abyssal zones and its very deep in oceans, cold, sunlight can't reach to it **B-lakes.** (1) in Egypt: - Idku , Manzala ,Mariout , Bardawil and Burullos (2) in Djibouti: - lake Assal have high concentration of salt so no aquatic living organismes live on it but it has some plants can grow on it	**Includes: -** **A-ponds and lake** (still water) Its characterized by water all the year but some lakes dry up in hot summer months and animals and plants that live there can adapt to this change **as** lake Nasser and Qaroun **,** Wadi Al-Rayan **B-flowing water** Which includes rivers and stream And they connect other bodies of water such as lakes,oceans and seas and many different plants and anima in it when meeting the salt water of seas and oceans with fresh water of river or lakes estuary is formed

Living organisms' that live in water bodies: -

Ponds	Stream	Oceans and seas
1-some plants as water lilies 2-some insects live and lay their egg 3- frog and salamanders that eat insect 4- some type of warm as leeches the bottom of ponds	1-mosses attaches themselves on rock as algae 2-catfish 3-catfish 4-crayfish 5-trout	1- Kelp 2- Dolphin 3- Starfish 4- Moses fish (flounder fish)

Hydrologist study how the hydrosphere(water) :-

1- run across the land (geosphere)
2- affects the living organisms (biosphere)
3- what happen to water in air (atmosphere)
4- affected by a pollution by micro plastic



Micro plastic	**Size**	Its length less than 5 mm
	Formed fro	Plastic wastes broken into small particle by wind ,sunlight and sea waves
	Found in	Everywhere on earth even the highest place on land or mountain and deepest part in oceans
	Harms	Micro plastic in aquatic ecosystem is more harmful to aquatic organisms than the large plastic G.R as the aquatic organisms can't differentiate between the real food and micro plastic
	Analyzing	Indian scientist studies the effect of micro plastic on the environment which come from the decayed plastic of bags, packing materials and fishing lines, and rivers carry this waste plastic to oceans



Concept 2

there are many natural resources on earth as: -

1-water 2- plants 3- metals

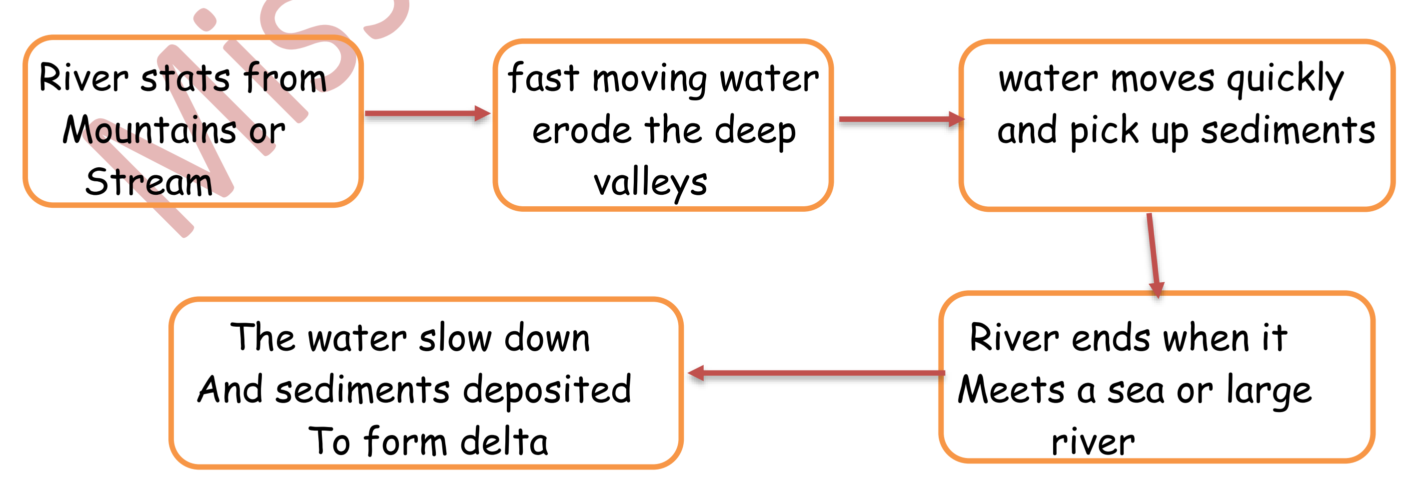
Water is valuable resource of energy **G.R**

Be, all living human, animals, plants need water to survive, it forms 2/3 of human body, keep body temperature constant

Water	Exists in	salt water, so we must conserve fresh water from pollution as pollution kill plants and animals
	In world	used in: - (fishing, drinking, operating, washing, ….etc)
	In Egypt	used in: - 1- generating electricity (high dam in Aswan). 2- agriculture (upper Egypt) This strategy causes imbalance of water and leads to drought of some places or flooding in other places
	To conserve Fresh water	1- drink more juice instead of water 2- turning of water tap when brush your teeth 3- taking a quick shower 4- turning off the water while washing your hair

Some water bodies in details: -

First: rivers



Delta "is a triangular shape area of mud and other sediments".

Second: lakes

They are large bodies of water in low-lying areas, surrounded by land





Third: -wetland

Fresh or salt, area above the ground partially covered with water as swamps

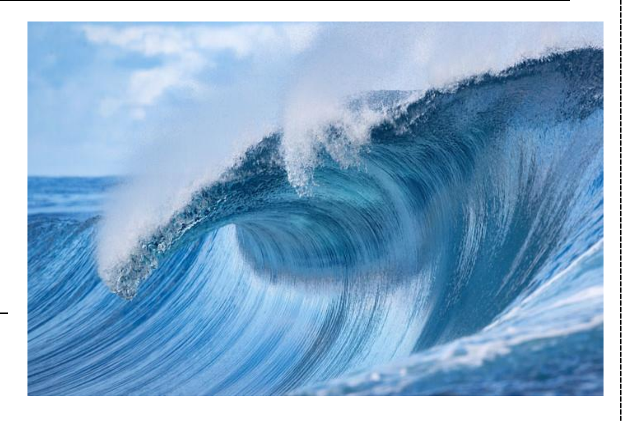
Fourth: -estuary

Salt water mixed with fresh water when river meets sea water or oceans and its home of thousands of plant and animals

Fifth: - ground water

Its fresh water, stored in cracks and spaces underground water
(the underground water in earth greater than the river and seas water)

Sixth: - oceans



Its salt water, surrounds the continents, and all oceans connected to each other, the floor of oceans contains: - mountains, plains and plateaus

Seventh: -watershed

Its area of land where water from different sources flows towards a common location from oceans, seas or other large water bodies

But if: -

1-There is more rainfalls	The level of water in rivers or stream will increase Causing **floods**
2-There is too little rainfalls	The level of water in rivers or stream will decrease Causing **drought**
3-There is water balance	The rivers or stream will have constant source of fresh water

You know that: -

10% of the world animals lives in fresh water habitat, but the poor quality of fresh water leads to: -

1- Death of thousands of living organisms every year
2- Extinction of living organisms that live in fresh water



By making **a model** to filter water from harmful materials to get filtered water, human can use it in many purpose

The most important give reasons in unit3: -

1-water can affect nonliving things as rocks
Be it causes weathering and erosion of rocks

2- our planet look like blue marble
Be more than 70% of earth covered with water

3-hiding the worms inside the soil is an example of interaction between two earths spheres.
Be worm is an example of biosphere but soil example of geosphere

4-importance of atmosphere for plant in making food
Be plants take CO_2 from air during photosynthesis process

5- more than 50% of known living organisms live in aquatic environment
Be water covers 70% of earth covered with water

6-most of the fresh water on earth can't be used for drinking
Be most of fresh water on earth in the form of frozen water

7-no green plants can survive in abyssal zones of oceans
Be abyssal zones don't receive sunlight which is important for making food in plants

8-mosquitoes lay their egg in ponds
Be pond is still water so eggs will not move away

9- recycling the plastic bottles more bitter than throwing them in seas and oceans
Be plastic pollute water and affect the life of aquatic living organisms

10-you should turn off water tap during brushing your teeth

To conserve fresh water

11-delta is formed at the river end

Be when river water slow down, sediments deposited at river forming delta

12-ground water is called by this name

Be it stored in cracks and sprains underground rocks

13-the quality of fresh water affects the life of living organisms

Be it lead to death of thousands of living organisms and their extinction

14- wastewater engineers test the treated water

To make sure that the water become safe before used by human

15- scientist tend to preserve freshwater sources on earth

Be the amount of fresh water is limited on earth

What happen when?

1-The water subjected to extreme cold weather

It will change to solid state

2-Fresh water meets a salt water

An estuary is formed

3-Plants can't get carbon dioxide from air

They can't make photosynthesis process or their foods

4-We compare the rainforest biome with the desert biome

Climate, plant & animals will be different in the two biomes

5-The lake dries up (what happen to animals)

They will adapt to the change or they will die

6-The egg of insect is laid in river instead of ponds

The egg will move away with the running water

7-Aquatic organisms eat plastic instead of the real food

They will get harmed

8-People don't conserve fresh water

The amount of fresh water will decreases

9-Water is collected in low –lying area

Lake is formed

10- **The quality of fresh water become poor**

It leads to death of living organisms or their extinction of aquatic living organisms that live in fresh water

11- **The rate of rain water increases in river**

Floods occurs

12- **Mixing clear water with mud**

It will form dirty water

The most important scientific term: -

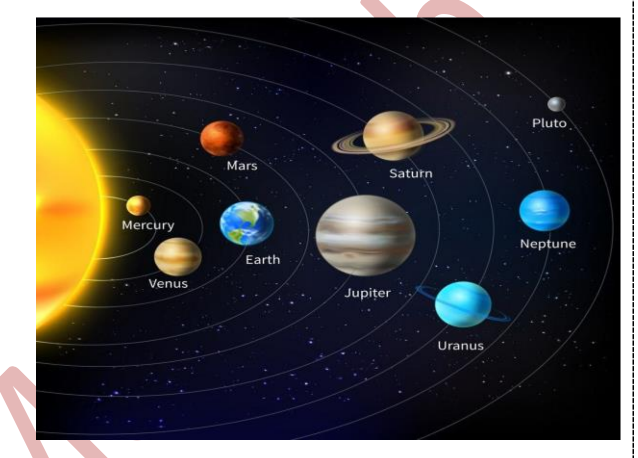
Geosphere	It's the system that includes all the layers of earth which are the crust, the mantle and inner and outer core
Hydrosphere	It is the system that includes all of the water on, under and above earth
Atmosphere	It's the system that includes all the gases that surrounds earth
Biosphere	It's the system that includes all living on earth
Biome	It's a large region of the world that have similar soil, climate ,plant and animals (wildlife)
Watershed	It's an area of land where water from different source flow common location usually an oceans , asea or other large wate body



((unit 4)) Concept 1

Gravity:

- The force of pulling objects with mass to the center of earth
- The force of attraction between objects, keeps objects on earth.
- The gravitational pulling force between sun and celestial bodies in solar system, keeps planet revolve in fixed oval (elliptical) orbit around the sun



- The gravity of moon affects the ocean tides and keep moon rotate around the earth
- It occurs between two objects even if they don't touch each other and if the mass of object increases the gravitational force increases. (vice versa).
- changes the direction of anything you through into air to fall downwards the ground
- gravity is invisible force, you can't see it but you feel its effect as it keeps atmosphere around the earth, hold things to the earth, skydivers and their parachutes pulled downwards earth's surface
- object with more mass pull objects with less mass.

Nicolaus Copernicus who discovered that earth revolve around the sun, and earth revolve around the sun at a speed 107000km/hr

If there is no gravity ......?

1- If you drop a ball it will not fall on the earth
2-The boy on the slide will not slide down
3- the moon will float off into space



If the mass of moon become twice its real mass ....?

The gravity of moon will increase so it will pull closer to earth and may crash with earth

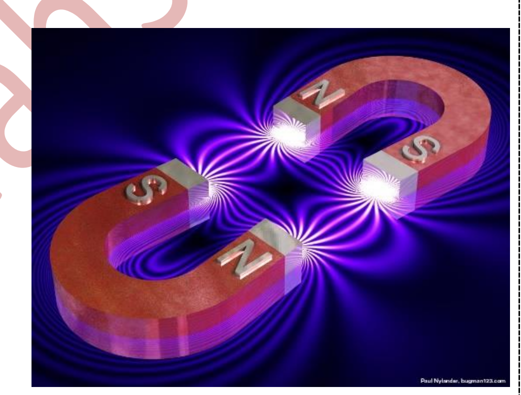
If the distance between the moon and the earth become twice ..?

The gravity between both of them would become smaller.

Forces: - It is needed to make object move.

- It is a pull or push that applied to object in different direction.
- Some force is weak like pushing toy car, some force is strong like pushing a real car
- It occurs between any two objects even if they in contact or noncontact **as: -**
  1-the magnet doesn't need to touch paper clips to attract it
  2-the earth doesn't touch moon to attract it
  3-the sun doesn't touch planets to attract them

Type of force



1- **Magnetism:** it's the **invisible** force can't be seen of attraction or repulsion between two magnets or between a magnet and object as paper clips and metallic objects as iron, nickel or cobalt

2- **Wind force**: -which is pushing force of blades of a wind turbine to move.

3- **Spring force**: - which is pushing force when you squeeze a spring

4- **Gravitational force:** - which is pulling force and attract object to fall on the earth surface, object with large mass has more gravity and object with low masses have low gravity

5- **Friction force:** - it's a type of force opposite the motion of body through air, water or solid objects

6- **Air resistance:** - it's a type of friction force opposite the movement of objects through air



Example1: -

If the skydiver opens his parachute it gets filled with air due to upwards flow of wind that cause air resistance which slow down the skydiver speed and fall to earth safety

Example 2: -

If you drop a feather and hummer at the same time from a height, the hummer will reach earth first as the air resistance effects on the feather which slow down its falling.

But imagine there is no air resistance, you will find that the feather and the hummer will reach the earth at the same time **G.R**

Be, gravity acts on all objects in the same way.

(((Concept 2)))

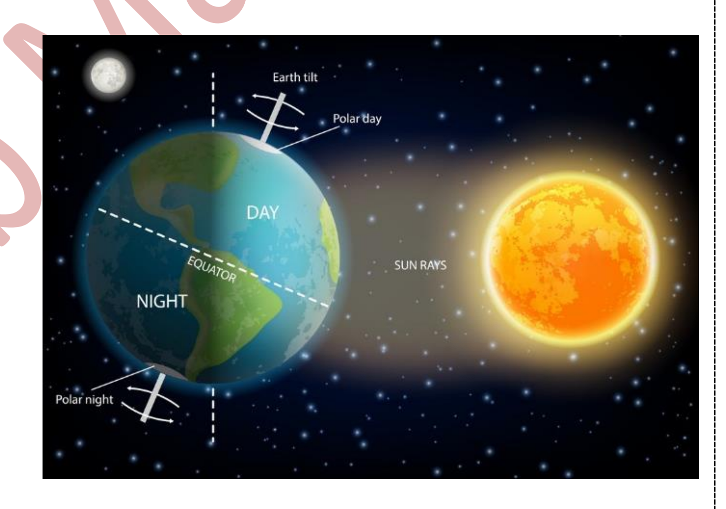
Due to rotation of earth around itself:

1- The cycle (pattern) of day and night

2- The sun, planet and stars appears to move across the sky, sun rise from east and set from west

(Jupiter is the fastest planet rotate around its axis)

3- Shadow of objects to move throughout the day and the sun causes formation of shadows



Cycle of day and night: -

Earth spins every day (24hr) by speed 1600km/hr around its axis with very high speed and we rotate with earth with this speed so we can't feel that its moving.

Due to this rotation half of the earth faces the sun and this part have day time, the other half of earth faces away the sun so they have night.

Earth axis: -

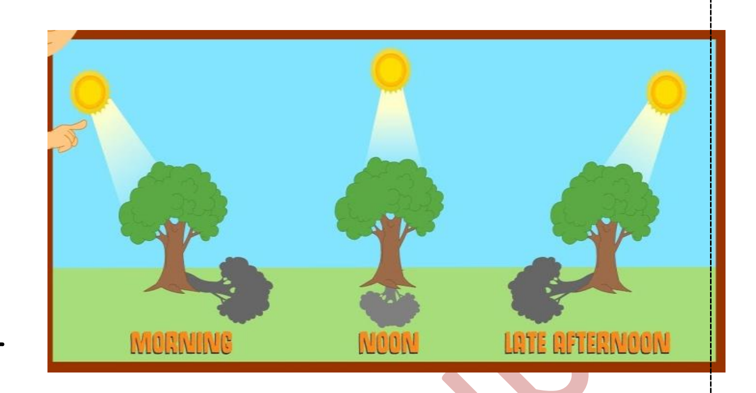
Its imaginary line passing through north pole and south pole of earth

When you are facing the north direction of earth:

In early morning: the sun rising from east (right hand).

At noon: the sun would be above you in the center of sky.

Afternoon: the sun would be to set from west (left hand).



If you change your direction facing north or south the sun always rise from east and set from west.

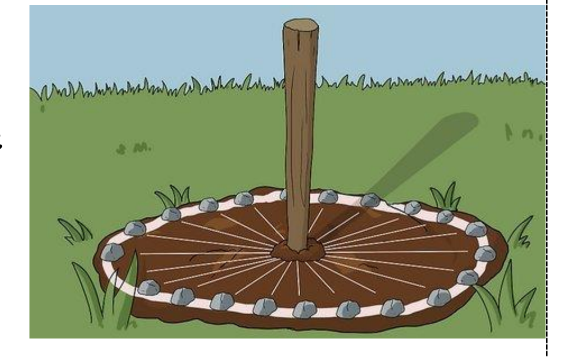
Rotation means: - spinning of object around its axis as earth rotate around its axis causing cycle of day and night

Revolution means :-orbiting of an object around anther object as earth revolve around the sun causing the cycle of four seasons.

Cycle: - it's a serious of events that is repeated in the same order

Earth rotate counterclockwise around its axis

The ancient Egyptian



Invented the first time piece (sundial) and from it we can conclude that: the change in the position of sun in the sky due to the earth rotation effects on the length of shadow line and their angle throughout the day

As at noon: the length of shadow is short

At morning and afternoon: the length of shadow is longer

Factors affecting the length of shadow and angle

1-position of the sun in the sky

2-the amount of sunlight that reaches earth surface in different seasons

Constellation: -

It's a group of stars that forms a pattern or looks like a certain shape in the sky



- Stars that form constellation are not connected to each other but if you imagine a line join this objects together, it will look like a shape of animal or person or an object
- Stars don't move in the sky but they seem to be move due to rotation of earth around its axis
- You can see many constellations in the sky during different time due to earth revolution around the sun
- You can see more constellation in winter more than summer, other constellation may be not visible from where we are on earth
- Every night new stars appears from east
- Location of constellation in the sky help us to know the four direction



1-stars make their own light from hot gases
2- may be small, medium or large and our sun is medium but we see it large as it's the nearest star to us and it is the biggest object in the solar system.
3- the sun provides the earth heat and light as it necessary for continuity of life on earth.
4-stars are closer to north and south pole
5-they are giant spheres of superhot gases of hydrogen and helium
6- stars appears bright due to burning of most of gases

Plants and moon don't make their own light; moon reflects the sunlight that falls on its surface.



The most important give reasons in unit4: -

1-the moon is attracted to the earth
Due to the gravity between moon and earth

2-the gravity between two objects is affected by the distance between them
Be when the distance between them increases the gravity decreases

3-the force of gravity has an important role in the solar system
Be it keeps planet revolve in fixed orbit around the sun

4-paper clips are pulled towards the magnet
Due to magnetism force

5-the ball changes its direction after we through it upwards
Be the gravity always pull it downwards

6-gravity of earth is greater than the moon
Be the mass of earth is greater than the moon

7-Skydivers open their parachute during their landing
Due to air resistance force and to decrease its speed

8-when you press on the bicycle brake its speed will stop moving.
Be brake increases the friction force which

9- some iron nails are attracted to the magnet.
Be magnetic force attracted them to the magnet

10-air resistance affects the object that falls from height
Be it slow down it during movement

11-a feather take a long time to reach the ground than a hummer
Be air resistance affects the feather greater than the hummer

12-occurance of day and night
Due to rotation of earth around its axis

13-half of earth appear dark at night
Be it doesn't receive sunlight of the sun

14-the sun appears as it moves across the sky
Due to rotation of earth around its axis

15-occuracnce of seasons
Due to revolution of earth around the sun

16-although earth rotate around its axis we don't feel its rotation
Be we rotate with the same speed with the earth

17-the length of shadow of an objects changes throughout the day
Due to change of the position of the sun in the sky

18-in the night sky some stars seem to rise and set like the sun
Due to rotation of earth around its axis

19- the moon appear bright in the sky
Be it reflect the sunlight of sun

20-stars in desert helps us to determine our correct way
Be the location of constellation in the sky helps us to know the main four direction

21- the sun looks much larger to us than other stars
Be the sun is the nearest star to us

22-stars appears bright at the sky at night
Be stars produce light

What happen when?

1-the distance between the earth and the moon increases twice
The gravitational attraction force will decreases

2- the mass of the moon decreases to half
The gravity of moon will decreases

3-you squeeze a spring then leave it free
The spring will go back when you leave it

4-there is no gravity on earth
All object on earth will float in the space

5- the gravity of sun disappear (plant?)
They will leave their orbit and float into space

6-the skydiver open the parachute (speed?)
The speed will decreases

7-a metallic ball and feather are thrown form a tower
The metallic ball will reach earth first

8-there is no air resistance and two objects with different mass thrown from the same height
They will reach the ground at the same time

9-earth doesn't rotate around its axis

Day and night will not occur

10-half of earth face the sun

This half will have day time

11-earth completes its spinning on its axis in 12 hours only

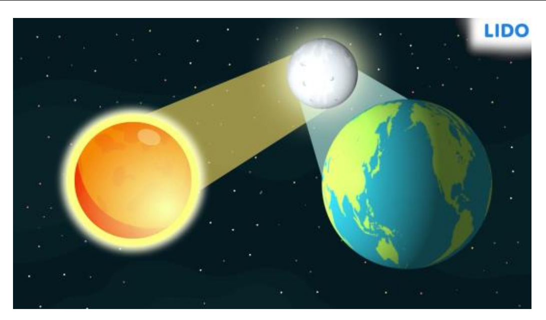
Day and night occurs

12-sunlight falls on moon surface

The sun seems bright

The most important scientific terms: -

Force	It's a pull of a push that is applied to an object
Magnetism	It's a force of attraction or repulsion between two magnets or between a magnet and an object
Gravity	It's the force of attraction that exists between objects that have mass
Friction	It's a force that opposes the motion of a body across a solid surface or through a gas or liquid
Air resistance	It's a force that opposes the movement of an object as it passes through air
Law of motion	The force of gravity is constant and acts on all objects same way
Earth's axis	It's an imaginary line passing through the north and south poles
Rotation	It's the spinning of an objects around an axis
Revolution	Its orbiting of an object around anther object
Constellation	It's a group of stars that forms pattern or look like a certain shape in the sky




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•*Concept 3.1*

•*Choose the correct answer: -*

1. **Rocks are broken down by water during ………..process.**

a) Erosion b) weathering c) breathing d) evaporation

2. **about ……..of the earth`s surface is covered with water.**

a) 1/3 b) ¼ c) ¾ d) 1/5

3. **Which of the following is a part of geosphere?.........**

a) Mountain b) oxygen c) worm d) river

4. **Plants and animals are parts of ………….**

a) Hydrosphere b) biosphere c) geosphere d) cryosphere

5. **Presence of sharks in the sea represent an interaction between ……..and …….**

a) Biosphere and geosphere b) hydrosphere and biosphere

c)atmosphere and hydrosphere d) biosphere and atmosphere

6. **During photosynthesis process, plants take carbon dioxide gas from air which represent an interaction between ………..and………….**

a) Biosphere and geosphere b) hydrosphere and geosphere

c)atmosphere and hydrosphere d) biosphere and atmosphere

7. **97% of earth`s water is …………**

a) Salt water b) fresh water c) sugar water d) no correct answer

8. **……………. is water body that surrounded by land.**

a) Sea b) river c) ocean d) lake.

9. **Estuary is a water body that contain ……………………..water**

a) Only Fresh b) only salt c) mixture of fresh and salt

10. **Water can control the ……….of living organisms bodies.**

a) Volume b) height c) length d) temperature


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• Complete the following statements: -

1. Saltwater can be found in ………. and …….....

2. When fresh water of river meets salt water of sea ………….is formed.

3. Irrigation of plants considered an interaction between …......and ….....

4. The amount of saltwater on earth …………..than amount of freshwater.

5. Some ponds and lakes dry up during …………. months.

6. According to the type of water, streams contain ………….water.

7. Micro plastic pieces in marine ecosystem are ………….. harmful than large plastics.

• write the scientific term: -

1. *Water body formed when river meets a sea.* (…………………….)
2. *Process of transportation of rocks into another places Due to the effect of water and wind.* (…………………….)
3. *The system that contain all landforms on earth.* (……………….…..)
4. *The system that include all water on earth.* (……………….…..)
5. *Area of the world that contain similar animals, plants, climate and soil.* (………………….)
6. *Zones of ocean or sea that sunlight cannot reach them.* (…………………..)
7. *Water body that found between cracks of rocks.* (…………………….)

• *put true or false: -*

1. *Water is important for all living organisms.* ( )
2. *The total amount of water on earth increases as time pass.* ( )
3. *Water is habitat for some living organisms.* ( )
4. *Water change into ice in extreme hot weather.* ( )
5. *some animals and plants can live in aquatic ecosystems.* ( )
6. *wetlands and forests are examples of biomes.* ( )

7. *Sunlight cannot reach the abyssal zones in oceans.* ( )
8. *There are many different types of plants in lake Assal.* ( )
9. *Wells and springs get their water from aquifers.* ( )
10. *Some ponds and lakes may dry up in winter.* ( )

- ***give reason for: -***

1. Water can affect non-living things such as rocks.
………………………………………………………………………………………
2. Earth looks like a blue sphere from space.
………………………………………………………………………………………
3. Growing of algae in oceans is an interaction between hydrosphere and biosphere.
………………………………………………………………………………………

- ***what happen: -***

1. *When river meet a sea.*
   ………………………………………………………………………………………
2. *When water exposed to extreme cold weather.*
   ………………………………………………………………………………………

Concept 3.2

- ***Choose the correct answer: -***

1. Human can use water in all the following except …………
a) Fishing *b) producing electricity*
c)transportation *d) weathering of rocks*

2. ***…………… is formed when water collects in low-lying area.***
a) ocean *b) river* *c) lake* *d) estuary*

3. the floor of ………… may contain mountains and plateaus.
a) ocean *b) river* *c) lake* *d) estuary*

4. ***the level of water in rivers and streams increase when there is more…………………***
a) sediments *b) rainfall* *c) sunlight* *d) wind*


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5. among kinds of wetlands are…………..and …………….

a) lakes and swamps *b) marshes and bogs*

c) oceans and ponds *d) no correct answer.*

6. the amount of fresh water on earth …….. salt water.

a) greater than *b) smaller than* *c) bigger than* *d) equal to*

7. among risks that threaten water areas on earth are………….

a) poor quality and scarcity *b) conservation and quality*

c) conservation and scarcity *d) conservation and extinction.*

8. the area of land where all water flows to a common location is called………..

a) wetland *b) estuary* *c) watershed* *d) stream*

9. in simple water filter, wastewater passes through …………..

a) cotton – sand – mud *b) cotton – charcoal – sand*

c) sand- cotton – charcoal *d) sand – charcoal – cotton*

10. we can use ………. To recycle wastewater to be used again.

a) filter *b) dam* *c) generator* *d) bottles*

- ***Complete the following:***

1. *In High Dam, water is used to generate............................*

2. Rivers contain......................... water, while oceans contain....................

3. Glaciers are sources of fresh water which have a............................state of matter

4. We must take a quick shower to conserve.........................

5. Delta is formed by the deposit of ……………at the end of …………..

6. When the water is stored in the cracks of underground rocks, ………….is formed.

7. The extinction of some species that live in fresh water is due to …………. quality of fresh water.

8. Building ………….. across the rivers from human activities that cause imbalance of fresh water.

9. …………., charcoal and …………….. can be used in making water filter.

10. To conserve fresh water, we can ………….time of washing our hands.


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- ***Put true or false:***

1. *Water makes about two-thirds of human body.* ( )
2. *Among the sources of fresh water are rains.* ( )
3. *The percentage of fresh water is higher than that of salt water, so we should conserve salt water.* ( )
4. *Turning off the water tap, while washing your hair is from the ways to conserve water.* ( )
5. *Oceans are considered as saltwater bodies.* ( )
6. *Rivers often start in mountains in the form of estuaries.* ( )
7. *Assal lake is surrounded by land and it is a low-lying area.* ( )
8. *The type of water in wetlands is salt water only.* ( )
9. *There is an estuary between Nile River and Mediterranean Sea.* ( )
10. *Groundwater is formed in the cracks and spaces between underground rocks* ( )
11. *Ocean's floor may have mountains, plains and plateaus.* ( )
12. *High quality of fresh water leads to the death of marine organisms live in it.* ( )
13. *Scarcity and conservation of fresh water are two main risks that threaten fresh water on earth.* ( )
14. *Fresh water scarcity and quality are two main risks that are threatened the world.* ( )
15. *Poor quality of fresh water leads to extinction of some species live in fresh water.* ( )
16. *More than 10% of the world's animal species live only in freshwater habitats.* ( )
17. *We must conserve fresh water, because it is limited on earth.* ( )


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18. *Building factories is from human strategies to control and conserve fresh water.* ( )
19. *Recycling of wastewater means removing waste materials from it.* ( )
20. *Cotton can be used as a filter to remove waste from water.* ( )
21. *Water is considered as a nonrenewable natural resource.* ( )

- ***Write the scientific term: -***

1. *Type of water that is suitable for drinking.* ( )
2. *Liquid that make about two thirds of human body.* ( )
3. *Water body that usually start at mountain as stream.* ( )
4. *Area that partially covered with water.* ( )
5. *Water body that surround the continents.* ( )
6. *Triangular shaped area rich in mud and other sediments.* ( )
7. *Building established across river to hold water behind it.* ( )
8. *Scientist who study water and relation between hydrosphere* and all other systems. ( )

- ***Give reason: -***

1. *We must conserve fresh water.*
   ……………………………………………………………………………….
2. *The quality of fresh water affects the living organisms that live inside it.*
   ……………………………………………………………………………….

- ***What happen when:***

1. *People don't conserve fresh water.*
   ……………………………………………………………………………….
2. *We mix clear water with small amount of mud.*
   ……………………………………………………………………………….


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Concept 4.1

- ***Choose the correct answer: -***

1. ***Gravity keeps the moon orbits around …………..***
   a) Sun b) earth c) itself d) no correct answer
2. ***Earth attracts objects toward ……………***
   a) The sky b) the moon c) the sun d) its center
3. ***Gravitational force affected by ………………………..***
   a)Mass only b) distance only
   c)mass and distance d) all the previous answers
4. ***Magnet can exert ………………. Force.***
   a) Pushing only b) pulling only
   c)pushing and pulling d) no correct answer
5. ***Blades of wind turbine move by the force of …………***
   a)water b) wind c) electricity d) magnet
6. ***In contact force objects must ……... each other for the motion of one of them.***
   a) Touch b) break c) repel d) attract
7. ***Any object has mass must have ……….***
   a) Gravity b) electric charge c) magnetism d) no correct answer
8. ***…………….is considered type of friction forces resulted from movement of object in air.***
   a) Gravity b) air resistance c) magnetism d) electric

- ***Complete the following: -***

1. *The gravity of moon affects the ocean …………….*
2. *When the distance between two objects increase, the gravitational force between them …………………*
3. *If the mass of moon decrease, its gravity force will ……………………*
4. *Any static object require ………….. to move.*
5. *Magnet can attract objects by the force called ……………..*
6. *Force may push or ………. Object to make it move.*



7. When the skydiver open hi parachute, its speed ……………due to increasing of …………………

- **Put true or false: -**

1. If the gravity of earth disappear the moon would float into space. ( )
2. Gravity affects only the moving objects. ( )
3. Magnet has invisible force called magnetism. ( )
4. Small planets have bigger gravity than big planets. ( )
5. When you leave a squeezed spring, it has no force to return Back to its original state. ( )
6. Magnet must touch objects to attract them. ( )
7. Friction force opposes movement of object. ( )
8. Air resistance increase the speed of parachute. ( )
9. The orbits of planets has an ellipse shape. ( )
10. The gravity of earth keeps planets revolve in a fixed orbits Around the sun. ( )

- **Give reason for: -**

1. Moon is attracted to earth.
   ……………………………………………………………………………………..
2. Gravity force affected by distance between objects.
   ……………………………………………………………………………………..
3. The direction of ball changes when it thrown into air.
   ……………………………………………………………………………………..
4. Gravity of earth more than gravity of moon.
   ……………………………………………………………………………………..


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- ***What happen if: -***

1. *There is no gravity on earth.*
   ……………………………………………………………………………….
2. *The gravity of sun disappears.*
   ……………………………………………………………………………….
3. *The mass of moon increase twice.*
   ……………………………………………………………………………….

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concept 4.2.

**** Choose the correct answer:***

1. The Earth rotates around itself once every ………………………….

a. 24 hours. b. 365 days. c. 365 hours. d. 24 days.

2. The Earth rotates ………………………. on its axis.

a. clockwise b. counterclockwise c. from north to south d. from south to north

3. A person can exert a weak force to move ………………………..

a. a big truck b. a toy car.. c. a real car. d. a very big rock.

4. The solar system contains ………………………..

a. moons day. b. planets only. c. planets and the Sun. d. Stars and planets.

5. At night we see............ in the sky.

a. the Sun and the moon b. Earth and Sun c. the moon and Stars d. Stars and Earth

6. The Sun forms a shortest shadow of an object …………………..

a. at noon. b. in the morning. c. at night. d. in the afternoon.

7. The imaginary line that passes through Earth's center is called …………………

a. the day. b. the axis. c. the night d. the pole.

8. The orbiting of an object around another object is called …………………..

a. revolution. b. spinning. c. rotation. d. speed.

9. In late afternoon, the Sun appears in the .... direction in the sky.

a. east b. west c. north d. south



- ***Complete the following sentences:***

1. *The planets of the solar system rotate on their ……………….. at different …………*
2. *In the early morning the Sun would be at ……………. direction in the sky.*
3. *The orbiting of the Earth around the Sun is called ………………….. , while the spinning of Earth on its ………………….. is called rotation.*
4. *The Earth completes one cycle on its axis once every ………………… hours*
5. *The Sun appears as it rises in east direction and sets in ………… direction*
6. *Planets revolve around ………………….. in fixed ……………..*

- ***Complete the following sentences using the words below:***

(The center of the sky - Earth-east-axis - 24 hours)

1. Occurrence of day and night is due to the rotation of .... on its …………....
2. Earth completes one rotation on its axis once every ……………………………..
3. In the early morning the Sun appears in ....while at noon it appears in ……………….

**** Put true or false:***

1. The Earth rotates on its axis faster than Jupiter. (   )
2. Rotation of Earth around its axis causes the cycle of day and night.   (   )
3. The Earth has an imaginary vertical axis. (   )
4. Earth rotates counterclockwise on its vertical axis. (   )
5. Earth orbits the Sun in an oval path. (   )
6. The Sun would be above you in the center of the sky at noon and at night. (   )
7. Hubble Space Telescope and Galileo binoculars are used to see distant space objects in more details. (   )

8. A galaxy is formed of a group of stars, planets and gases held together by gravity. (   )

9. The Sun provides Earth with thermal energy only. (   )

10. Stars and planets appear to move in the sky due to revolution of Earth around the Sun. (   )

11. Earth takes a whole day to make one complete turn around the Sun. (   )

12. The half of Earth that faces the Sun has day. (   )

**** Choose from column (B) what suits in column (A) :***

(A)	(B)
1.Albert Einstein 2. Copernicus 3. The sun	a. Orbits around Earth. b. Locates at the center of the solar system. c. Proved that the Sun is the center of the solar systems. d. Explained how the Sun convers matter directly into energy.

1. ……………….. 2. ……………… 3. ………………

(A)	(B)
1.Day and night phenomenon 2. Four seasons phenomenon 3. Formation of shadows	a. occurs due to the movement of the Sun in the sky b occurs when Earth completed one cycle on its axis c. occurs due to the revolution of the moon around Earth d. occurs due to the revolution of Earth around the Sun

1. …………………………. 2. ………………………… 3. …………………………..

**** Correct the underlined word:***

1.Constellation consists of a group of **<u>planets</u>** that form a pattern (…………………..)

2. Every night, new stars appear from **<u>west</u>** (………………………)

3. Jupiter revolves around the Sun in a **<u>rectangular</u>** orbit (……………………..)

- ***Give reason for:***

1. The sun keeps eight planets and more than 200 moons in fixed orbits around it
   ……………………………………………………………………………………………
2. Constellations appear at different locations at the sky during different times of the year
   ……………………………………………………………………………………………
3. The sun appears as it moving from east to west
   ……………………………………………………………………………………………


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4. The appearance of the stars as they are moving across the sky
……………………………………………………………………………………………
5. Earth and the moon are not considered stars
……………………………………………………………………………………………
6. Occurrence of seasons
…………………………………………………………………………………………

- ***What happens if:***

1. The part of Earth that doesn't receive Sunlight
……………………………………………………………………………………………
2. Earth doesn't revolve around the Sun
……………………………………………………………………………………………
3. A part of the Earth's surface faces the Sun
……………………………………………………………………………………………
4. A group of stars form a pattern or look like a certain shape in the sky
……………………………………………………………………………………………

Science is simple
Mr. Mohamed El-Sadany



Model exam one

Question {1}: A- choose the correct answer: -

1. **During photosynthesis process, plants take carbon dioxide gas from air which represent an interaction between……..and ……**
   a) Biosphere and atmosphere *b) geosphere and atmosphere*
   c)geosphere and hydrosphere *d) hydrosphere and biosphere*
2. ***the floor of ………… may contain mountains and plateaus.***
   a) ocean *b) river* *c) lake* *d) estuary*
3. ***In contact force objects must ……... each other for the motion of one of them.***
   a)Touch *b) break* *c) repel* *d) attract*
4. ***The Sun forms a shortest shadow of an object …………………...***
   a. at noon. *b. in the morning.* *c. at night.* *d. in the afternoon.*

B: give reason for:

1. ***We must conserve fresh water.***
   …………………………………………………………………………………………….

Question {2}: A: put true or false: -

1. *wetlands and forests are examples of biomes.* ( )
2. Poor quality of fresh water leads to extinction of some species live in fresh water. ( )
3. Magnet must touch objects to attract them. ( )
4. Earth rotates counterclockwise on its vertical axis. ( )

{B}: What happen when: -

1. *The mass of moon increase twice.* *(according to its gravity)*
   ……………………………………………………………………………….



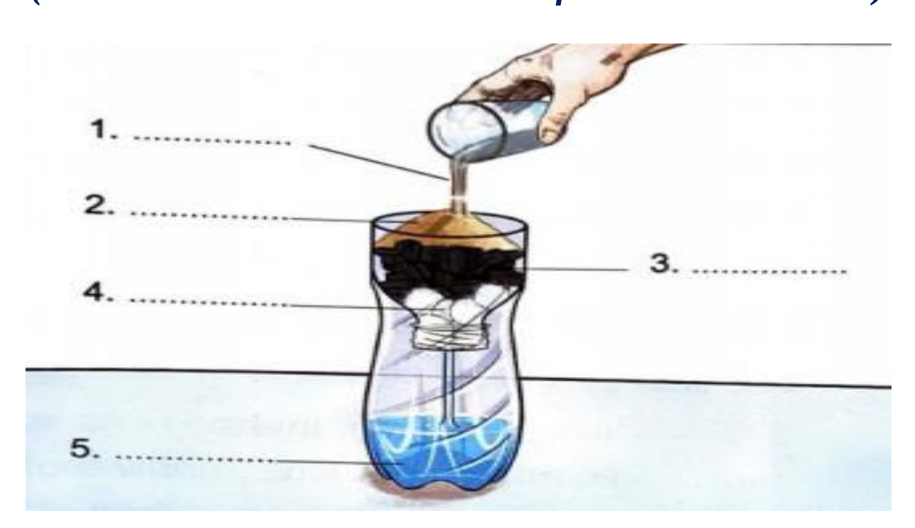
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- ***Question three: A: Complete the following: -***

1. *Micro plastic pieces in marine ecosystem are …………. harmful than large plastics.*
2. *Building ………. across the rivers from human activities that cause imbalance of fresh water.*
3. *Magnet can attract objects by the force called ……………..*
4. *Planets revolve around ………………….. in fixed ……………..*

{B}: Label the opposite figure using the words below: -

(cotton – charcoal – wastewater – filtered water – sand)





Model answer

Concept 3.1

1. Choose: -

1. b 2.c 3.a 4.b 5. B 6. d 7. a 8.d 9.c 10.d

2. Complete: -

1. oceans, seas 2. Estuary 3. Biosphere and hydrosphere
4.more 5- summer 6. Fresh 7. More

3. scientific term: -

1. ESTUARY 2. Erosion 3. Geosphere 4. hydrosphere 5. biome
6.abyssal zones 7. Ground water

4: true or false: -

1. true 2. false 3. true 4. false 5. true 6. True 7. true 8. False

5: give reason: -

1. Because water causes weathering and erosion of rocks.
2. Because about three quarters of earth covered with water.
3. Because algae belong to biosphere and ocean is part of hydrosphere.

6 -what happen: -

1. Estuary will be formed.
2. Water freezes and changed into solid state.



concept 3.2

Choose:

4. D 2. C 3. A 4. B 5. B 6. B 7. A 8. C 9. D 10. A

Complete

1. Electricity 2. Fresh, salt water 3. Solid 4. Fresh water
5. Sediments,river 6.aquifer 7. Poor 8. Dam 9. Sand , cotton

True or false:

1.true 2. True 3. False 4. True 5. True 6.false 7. true 8. False
9.true 10. True 11. True 12. False 13. false 14. True
15. true 16. True 17. True 18. False 19. False 20. True 21. False.

scientific term:

1. fresh water 2. Water 3. River 4. Wetland 5. Ocean
6.delta 7. Dam 8. Hydrologist

give reason:

1. because the amount of fresh water is limited.
2. Because poor quality of fresh water lead to death of some species of living organisms that live in fresh water.

What happen:

1. The amount of fresh water will decrease.
2. It will become dirty water.

Concept 4.1

Choose

1. Earth 2. Its center 3. Mass and distance 4. Pushing and pulling
6. Wind 6. Touch 7. Gravity 8. Air resistance.

Complete:

1. Tide 2. Decrease 3. Decrease 4. Force
5.magnetism 6. Pull 7. Decrease, air resistance



True or false:

1. True 2. False 3. True 4. False 5. False 6. False 7. True
8.false 9. True 10. False

Give reason:

1. Due to the gravity force of earth.
2. Because when the distance between objects increase, the gravitational force between them decrease and vice versa.
3. Because the gravity pulls the ball downward.
4. Because mass of earth more than mass of the moon.

What happen:

1. all objects on its surface will float into space.
2. All planets would just float into space.
3. Its gravitational force will increase.

Concept 4.2

Choose:

1. A 2. B 3. B 4. C 5. C 6. a 7. B 8. A 9. B

Complete:

1. Axes , speed 2. East 3. Revolution , rotation 4. 24 5. West 6. Sun, orbits

Complete using words:

1. Earth , axis 2. 24 hours 3. East , the center of sky.

True or false:

1. False 2. True 3. True 4. True 5. True 6. False 7. True
8.true 9. False 10. False 11. False 12. True


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Choose from column B what suits in column A

1. D 2. C 3. B

1- B 2. D 3. A

Correct:

1. Stars 2. East 3. Oval or Ellipse

Give reason:

1. *Due to the gravity force of the sun.*
2. *Due to revolution of earth around sun.*
3. *Because earth rotates on its axis from west to east.*
4. *Due to rotation of earth on its axis.*
5. *Because they don't emit their own light.*
6. *Due to revolution of earth around sun.*

What happen:

1. *This part would have night.*
2. *The cycle of seasons will not happen.*
3. *This part would have a day.*
4. *Constellation will be formed.*



1 Choose the correct answer:-

1. All of the following are components of the atmosphere, <u>except</u>……

a. oxygen gas. b. nitrogen gas. c. molten rock d. water vapor.

2. Rocks are broken down into smaller particles during………… process.

a. photosynthesis b. weathering

c. erosion d. respiration

3. Which of the following is a part of the hydrosphere? ....

a. Water. b. Air. c. Rocks. d. Plants.

4. Which of the following is a part of biosphere?

Q. ice. b. clouds c Water d. Animals.

5. Mountains and valleys are parts ……………………..

a. geosphere b. atmosphere c. biosphere d. hydrosphere

6. Nitrogen and oxygen are gases that make most of the………………

a. biosphere b. geosphere c. hydrosphere d. atmosphere.

7. 97% of Earth's water is…………………………

a salt water b. sugar water c. fresh water d. frozen water.

8. Formation of lakes is an example of an interaction between ……..and……….

a. biosphere-hydrosphere C. atmosphere -biosphere

b. hydrosphere-geosphere. d. geosphere- atmosphere

9. All the following water bodies contain salt water, <u>except</u> ………………

a. gulf. b seas. c. oceans. d. rivers.



10. Which of the following is found between pores of rocks below Earth's surface?...........

a. ice b. Groundwater, c. Oceans. d Water vapor.

11. Hydrologists study the movement of .... across the Earth

a. air b. rocks c. water d. plane

12. All the following are factors affecting the breakdown of plastics into microplastics, except……

a. sunlight b. moon c. wind d. sea waves

13. Water evaporation and its condensing on planet Earth show an interaction between…………… and …………….

a. hydrosphere – atmosphere b. hydrosphere-biosphere

c. biosphere-geosphere d. biosphere-atmosphere

14. All the following organisms can be negatively affected by throwing plastic waste in seas, except……………

a. fish b. shrimps c. corals d. foxes

15. The basic liquid matter which is needed by humans, animals and plants to survive is

a. milk. b. water. c. oil. d. alcohol.

16. Water can control the………………..of living organisms bodies.

a. length b. height c. temperature d. volume

17. All the following are from sources of water on the Earth, except..

a. aquifers. b. ponds. c. glaciers. d. molten rocks.



18. Among the ways of conserving fresh water is…………

a. taking a quick shower.

b. keep faucet opening during wash your hair.

c. drinking more water instead of juice.

d. taking a long shower.

19.Among the sources of water which human can use for drinking …..

a. seas. b. oceans. c. saltwater lakes d. rivers.

20**. Estuary is formed when the water of………meets the water of……………**

a. a river - a sea. b. a river - groundwater.

c. a sea - an ocean. d. a sea - a wetland.

21. The floor of .. may contain mountains and plateaus.

a. wetland b. oceans c. rivers d. lakes

22. Delta is formed when……………………….

a.the speed of water increases.

b.the speed of water decreases.

c.the amount of river's water decreases.

d.the river's water dry up.

23. The area of land where all the water flows to a common location as ocean called……………

a. tributary. b .estuary. c. wetland. d. watershed.

24. The level of water in a river may increase causing flooding, when there is more……………………….



a. rainfall. b. wind. c. sunlight. d. sediments.

25. Paper of books are made from....................

a. oil products b. wool of sheep c. trees d.cotton

26. Plastic cup is made from..................... products.

a. plant b. animal c. oil d. human

27. Water cycle is considered as an example of.........

a. recycling water. b. preservation of water

c. overusing water. d. conservation of water.

28. …………….. are special kinds of scientists who work on recycling water in water treatment plants.

a. Hydrologists b. Aquatic biologists

c. Wastewater engineers d. Marine biologists

29. ………..process is used to get filtered water from polluted water.

a. recycling. b. preservation

c. sustainability d. conservation

30. All the following are from works of wastewater engineers, <u>except</u>………

a. design ways to protect a community from floods.

b. calculate the amount of drinking water that a community needs.

c. design tools that provide us with clean water.

d. always check for the amount of fish in it.

31-Gravity keeps the moon in orbit around…………

a. Sun. b. Earth.



c. itself. d. another moon.

32. Earth attracts objects towards……………….

a.its center. b. the sky c. the moon d. the sun.

.

33. Gravitational force of Earth is affected by…………..

a. mass and time b. mass and distance.

c. mass only. d. distance only.

34. A boy on a slide moves down toward the ground due to the effect of……...

a. the boy's height b. gravity

c. friction c. the temperature of air.

35. All of the followings are properties of Earth's gravity, except……….

a. it pushes objects upward. b. it affects the moon.

c. it pulls objects downward. d. it is a type of attraction force

36. Magnetism is a kind of…………force.

a. attraction only. b. repulsion only.

c. visible d. invisible

37.Wind turbine blades move by the effect of……………………

a. magnetism b. wind

c. electricity d. water vapor.

38. In contact force, the two objects need to………..….each other.

a. attract b. repel

c. touch d. break

39. A person can exert a weak force to move…………….

a. a big truck b. a toy car

c. a real car d. a very big rock



40.The force that opposes the movement of objects as they pass through air is known as……….

a. magnetism b. gravity c.electric d. air resistance

41.……………….is considered as a type of friction force.

a. Air resistance b. Magnetism

c. Gravity d. Electric force

42. Which of the following objects has the least attraction force?

a. The moon b. The Earth

c. The Sun d. The magnet

43. Friction force…………the movement of objects.

a. slows down b. increases

c. speeds up d. doesn't affect

44. Magnetism is a force that attracts objects made of the following materials except…………

a. iron b. nickel

c. wood d. cobalt

45.………….is a factor that acts against gravity force.

a. Magnetism b. Mass of an object

c. Air resistance d. Shape of an object

46. When a basketball falls down from a height, it is affected by…………..

a. air resistance force only b. gravity force only

c. air resistance and gravity force d. air resistance and electric force



47. Which of the following objects will take longer time to reach the ground if they are dropped from 5 meter height at the same time?

a. An iron ball
b. A feather
c. A plastic ball
d. A hammer

48. What is the effect of air resistance on the speed of an object when it falls downward due to gravity?

a. Air resistance speeds up the object as it falls.
b. Air resistance doesn't affect the speed of an object as it falls.
c. Air resistance slows an object as it falls.
d. Air resistance changes the direction of an object as it falls.

49. The force of……………keeps the planets on their paths around the sun.

a. air resistance
b. friction
c. gravity
d. electricity

50. Gravity is…………force that holds all objects in their places.

a. visible pulling
b. visible pushing
c. invisible pulling
d. invisible pushing

51. The planets revolve around the sun in fixed…………..orbits.

a. oval
b. irregular
c. rectangular
d. triangular

52. The speed of Earth's revolution around the sun is nearly …………Km per hour.

a. more than 100.000
b. more than 200,000
c. less than 100,000
d. less than 50,000

53. ………….is (are) the center of the solar system.

a. The Earth
b. The sun
c. The moon and Earth
d. The sun and Earth



54. Orbiting of Earth around the Sun causes the……………..

a. cycle of day and night. b. cycle of seasons

c. increasing the speed of Earth d decreasing the speed of Earth.

55. The number of stars in the solar system is …………………..

a. one. b. eight. c. nine. d. two.

56. The Earth rotates…………on its axis.

a. clock wise b. counter clockwise

c. from north to south d. d. from south to north

57. The solar system consists of some………and one…………….

a. Sun - planets. b. moons - planets,

c. planets-Sun. d. planets-moon.

58. Jupiter is a…….. and it has…………on its axis.

a. moon - highest speed b. planet - lowest speed

d. planet - highest speed d. star- lowest speed

59. When you look at the sky, you can see all the following celestial objects with naked eye, except…………

a some stars, b the Sun. c. the Earth. d. the moon.

60. The powerful gravitational pulling force of the Sun is related to……….

a. the light of the moon. b. the mass of the moon,

c. the light of the Sun. d. the mass of the Sun.

61. Which of the following statements is correct?

a. Earth orbits the moon. b. the moon orbits Earth,

c. Earth orbits two stars. d. the Sun orbits Earth.



62.. …………….locate(s) at the center of our solar system.

a. The moon and the Sun
b. The moon and Earth
c. The Sun only
d. Earth only

63. We can observe thousands of……………in the sky at night that give off heat and light.

a. moons
b. stars
c. planets
d. satellites

64. Each planet revolves around the sun in a fixed…………….

a. system
b. circular orbit
c. straight line
d. ellipse orbit

65. All the following materials can be used in simple water filter model <u>except</u>

a. cotton.
b. oil.
c. charcoal.
d. sand.

66. Gravity is described as it is…………..force.

a. pushing
b. contact
c. visible
d. pulling

67. Water…………may leads to drought or flooding.

a. balance
b. imbalance
c. pollution
d. scarcity

68. In basketball game, which force opposes the motion of the ball in the air?

a. Air resistance
b. Magnetism
c. Gravity
d. Wind force

69. Most of water on Earth is…………………

a. mixture.
b. freshwater
c. saltwater
d. sugary water

70. A force that is arises between two attached surfaces leading to slow movement is called……………force.

a. Gravity
b. Friction
c. Magnetism
d. wind force



71. Filters can be used to………………wastewater to be used again by human.

a. analyze b. store c. collect d. recycle

72. Planets revolve in orbits around the sun because sun is the………..object in solar system.

a. hottest b. coldest c. brightest d. biggest

73. Skydiver's speed decreases in the air because……………

a. the Earth's gravity that pulls him down

b. the parachute friction with the air

c. air resistance affecting the parachute

d. b and c

74. ……………….process means removing any harmful material from water.

a. respiration b. photosynthesis c. preservation d. recycling

75. What goes up, must come down due to …………. the force of

a. air resistance b. wind force c. gravity d. magnetism

76. River or streams will have constant source of fresh water in case of……

a- little rain b. more rainfall c- water imbalance d. water balance

77 . As the mass of the object increases, its ………….increases.

a. movement b. gravity c. force d. illumination

78. Wind turbine blades move due to

a. the pulling force of gravity b . The pushing force of the wind

c. the pushing force of air resistance d. the pushing force of gravity



79. A group of plants and animals which line together in a large area characterized by its climate is called ………………

a. atmosphere. b. hydrosphere. c. biome. d. geosphere.

80. ……. are formed when water collects in low-lying areas.

a. Seas b. Lakes c. Rivers d. Oceans

2 Write the scientific term:-

1. A water body that is surrounded by land.	(……………….)
2. An area where the fresh water of a river meets the salt water of a sea.	(……………….)
3. A cycle shows the continuous movement of water from the Earth to the atmosphere then to the Earth again.	(……………….)
4. The process of breaking down of rocks into smaller particles due to the effect of rain, water or temperature	(……………….)
5. The process in which the small particles of rocks are transported from a place to another.	(……………….)
6. The system of Earth which contains all different landforms.	(……………….)
7. The Earth's system which is made up of water.	(……………….)
8. The frozen water part of the hydrosphere.	(……………….)
9. The Earth's system which consists of a mixture of gases surrounding Earth	(……………….)
10. The system that includes humans, animals and plants on Earth.	(……………….)
11. A large area of the world that has similar soil, climate, plants and animals	(……………….)
12. The largest saltwater ecosystems that cover large parts of Earth's surface.	(……………….)



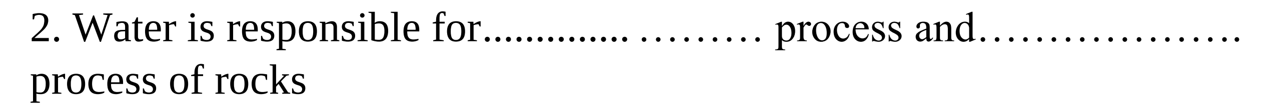
13. Areas of the ocean which contain coral reefs and intertidal zones.	(…………………)
14. The area along the coast that disappears at the high tide and appears at the low tide.	(…………………)
15. A type of pollution that occurs as a result of throwing waste in rivers and seas.	(…………………)
16. The scientist who studies water and its movement around the Earth.	(…………………)
17. A water body that is surrounded by land.	(…………………)
18. An area where the fresh water of a river meets the salt water of a sea.	(…………………)
19. It is an area of land where all the water flows to a common location usually an ocean, a sea or other large water body.	(…………………)
20. A type of water which is suitable for drinking.	(…………………)
21. A building established across a river which can hold water behind it.	(…………………)
22. It is the liquid that makes up about two-thirds of the human body	(…………………)
23. a large sheet of ice of snow that moves slowly over Earth's surface	(…………………)
24. Tiny plastic particles that result from the breakdown of larger plastics.	(…………………)
25. Water that lies beneath (under) Earth's surface.	(…………………)
26. It is a land area which is partially covered with water.	(…………………)
27. A triangular-shaped area of mud and other sediments that forms when a river meets a sea.	(…………………)
28. A building established across a river which can hold water behind it	(…………………)
29. The water that is stored in the cracks and spaces between underground rocks.	(…………………)



30. The water bodies that surround the continents.	(………………….)
31. The effect that pull or push an object to make it move.	(………………….)
32. The force that is found between two magnets or between the magnet and an object.	(………………….)
33. The phenomenon that occurs due to the rotation of Earth on its axis.	(………………….)
34. An imaginary line that passes through the two poles of the Earth	(………………….)
35. The phenomenon that occurs when half of the Earth doesn't t receive the sunlight	(………………….)
36. A phenomenon occurs due to Earth's revolution around the sun	(………………….)
37. The force by which metals are attracted or pulled to a magnet	(………………….)
38. The spinning of Earth on its axis.	(………………….)
39. -A type of friction force that opposes the movement of an object as it passes through air.	(………………….)
40. The force of gravity is constant and acts on all objects in the same way	(………………….)
41. It is a force that opposes the motion of a body across a solid surface.	

3 Complete the following:-

1. The Earth's system that includes all living organisms is called ……………..



2. Water is responsible for............. ……… process and………………. process of rocks

3. Water bodies on Earth can change from liquid state to…………state by freezing, while they can change into……………state by evaporation.



4. Fresh water forms some water bodies such as……..and some lakes, while seas and oceans and formed of……………….water.

5. When a river meets a sea, an……………….is formed.

6. A water body that is formed of water from rain or melting of snow and moves into rivers or the ground is called ………………………….

7. The Earth consists of 4 layers which are the ....,………… ….and inner and outer core.

8. The large sheet of ice or snow that moves slowly over Earth's surface is known………………………………

9. We can classify the aquatic ecosystems according to their amounts of salt into ……………… ecosystem and …………………..ecosystem.

10. Abyssal zone in the ocean is a dark area as………………can't reach it.

11. Some ponds and lakes dry up in the………………..months.

12. According to water movement, ponds have ……….. water while streams have............... water.

13. There are two types of water which are……………..and………………

14. From sources of fresh water are………………..and…………………..

15. From sources of salt water are…………………and…………………..

16. In High Dam, water is used to generate……………………

17. Glaciers are sources of fresh water which have a……………… state of water.

18. When a river meets a sea, an …………........ is formed.

19. When the water is stored in the cracks and spaces of underground rocks, …………is formed.



20. The type of water that is found in rivers, most of lakes and streams is a ………..water.

21. The land that is partially covered with water is called…………..

22. Groundwater is replaced by…………….

23. The run out of ………………..causes wells to become dry.

24. Plastic is made from .... while paper and wood are made from……………….

25. Clothes can be made from ....

26. To conserve water, we can ………………time of washing our hands.

27. Objects move down from high place toward the ground due to the effect of…………..

28. The moon moves around…………due to gravity.

29. Gravity pulls objects toward the……….of Earth.

30. When the distance between the moon and the Earth increases, the gravitational attraction between them……....

31. The gravity of the moon affects the phenomenon of ocean………..

32. If the mass of the moon increases than its real mass, its gravitational attraction……….

33. Magnet can attract some objects by a force called ………………

34. The astronauts float in space due to the absence of………………

35. The gravity of Earth is……………than that of the moon because the Earth has ………………..mass.

36. The force that pulls objects down toward Earth's surface is called………



37. When the skydiver opens his parachute the force of……….makes its speed …………….

38. Stars seem to move across the night sky due to the…………of Earth its axis.

39 .Planets and ………can't make their own light

40. Stars seem bright because they are made up of……………….

41. The solar system contains eight…….and more than 200……..

4 Correct the underlined word:

1. The Sun is a **planet** that can gives out light. (.......................)

2. The moon seems bright as it **absorbs** sunlight. (………………)

3. **Earth** is the center of the solar system. (........................)

4. Both Earth and the moon complete one cycle around the Sun **every24 hours.** (……………….)

5. Air resistance is a type of **pushing** force. (………………)

6. Air resistance force acts in the **same** direction of gravity force. (………….)

7. Air resistance is a factor that **speeds up** the falling objects toward the Earth.

8. Earth attracts the **Sun** to move around it. (……………)

9. If the mass of the moon decreases its gravity force will **increase.** (…………..)

10. The gravity of **Earth** pulls all planets toward its center. (………………..…..)

11. All of the water on Earth represents the **atmosphere (……………………..…)**

12. Some ponds and lakes may dry up in **winter** months (…………………….)

13. Living organisms are parts of **geosphere**. (……………………)

14. Rivers and **oceans** are freshwater moving bodies. (……………………)

15. The type of water in **wetlands** is salt water only. (……………………)

5 Put (✓) or (✗):

1. Gases which surround the Earth represents the atmosphere. ( )
2. There are no living organisms live in the hydrosphere. ( )
3. The water on Earth represents the hydrosphere. ( )
4. Some ponds and lakes may dry up in winter months. ( )
5. Rivers and streams are freshwater moving bodies. ( )
6. Living organisms are parts of geosphere. ( )
7. Some types of worms such as leeches live at the bottom of the ponds ( )
8. You must decrease the time of taking your shower to conserve water ( )
9. Water is considered as a non-renewable natural resource. ( )
10. Adding some of mud to a clear water can pollute it. ( )
11. We must conserve salt water because it is limited on Earth. ( )
12. Objects are pushed away each other due to gravity. ( )
13. The gravity of moon affects the ocean tides. ( )
14. As the mass of an object increases, its gravitational attraction decreases. ( )
15. Planets in the solar system revolve in fixed orbits due to the gravity between the sun and planets. ( )
16. Gravity pulls objects toward the center of Earth. ( )
17. Magnetism is a type of friction force. ( )



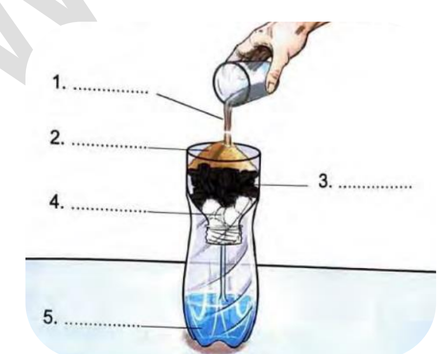
18. Skydiving sport depends on gravity force and resistance force. ( )

19. Friction force opposes the movement of an object. ( )

20. Air resistance slows down the speed of parachutes. ( ).

21. Magnetism is the force that attracts some metals. ( )

6-Look at the following figure, then answer the questions below:



A. Label the figure using the following words:

(Charcoal-Wastewater - Cotton - Filtered water - Sand).

B. The tool above shows a simple..............., and it is used to remove ……………. materials from wastewater

---

7-Complete the following sentences using the words below:

(Electricity - quality - rains - dam)

1. Building a .... across a tributary can change the amount of water in it.
2. The extinction of some species that live in fresh water is due to the poor water
3. In High Dam water is used to generate………………..
4. Groundwater is replaced by ………………. .



8-Complete the following sentences using the words below:

(harmful - charcoal - mud - filter - sand)

1. Human can ………………water to recycle wastewater to be used again.
2. Cotton,……....and................ can be used in making a simple water filter.
3. Water filters are used to remove……………… materials from polluted water.
4. Clear water can be polluted if it is mixed with………………

9- Complete the following sentences using the words below:

(Orbit - gravity - float)

1. When a boy moves down a slide, this is due to the force of ……..
2. Without the force of gravity, the moon would……….off into space.
3. Earth is pulling the moon, keeping it in its…….around Earth.

10- Complete :-

1.The force between the two magnets is called ……………

a. gravity. b. magnetism

e. contact force. d. wind force.

2.If there is a repulsion force between these two magnets so, they will move



a. away from each other. b. toward each other,

c. to the Earth's surface. d. to the space.



11-

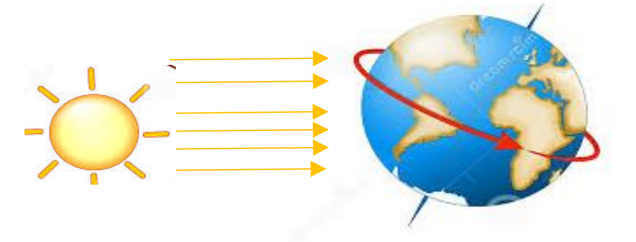




Figure (A)

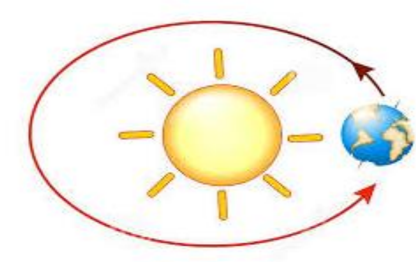


Figure (b)

1. Figure **(A)** represents cycle of ……………………………on earth.
2. Figure **(B)** represents cycle of ……………………on earth.
3. Figure **(A)** the (rotation – revolution) of earth around its axis every (**12 hour -2 hours– 24 hours)**
4. Figure **(B)** represents the (rotation – revolution) of earth around the sun every **(month - year – 24 hours)**

12- (This figure represents the solar system)

C

B

A

1. The body (A) is called ………………

(The moon- the sun- the earth)

2. The shape of path (B) is …………

(Circular- ellipse- triangular)

3. The body C revolve around the body (A) due to the effect of ………….

(Magnetism – friction – gravity)

13. Match

1.The word "Geo" refers to	a. water
2.The word "bio" refers to	b.earth
3.The word 'Atmos" refers to	c.life
4.The word "Hydro" refers to	d.vapour

14. Complete the following sentences using the words below:

(Geosphere - decrease - fresh)

1.To conserve fresh water, we can……….the time of washing our hands.

2. The earth's sphere that contains rocks, sand and soil is known as…….

3. The type of water that is found in rivers, most of lakes and streams is a…………water.



15. Match

(A)	(B)
l. Motion	a. the force between two objects that touch each other
2. Contact force	b. a pull or push that affects an object.
3.non-contact force	c. the change of an object location due to force.
4. Force	d. the force between two objects that don't touch each other.

16- Give reasons for:

1. Water is important for all plants on Earth.

……………………………………………………………………………

2. Water can affect non-living things like rocks.

………………………………………………………………………

3. Our planet looks like a blue marble from the space.

……………………………………………………………………………

4. Importance of atmosphere for plants in making their food.

………………………………………………………………………………

5. More than 50% of known living organisms live in the aquatic environments.

6. Some insects lay their eggs in ponds.

………………………………………………………………………………

7. No green plants can survive in the abyssal zones of oceans

………………………………………………………………………………



8. Planets revolve around the sun in fixed orbit.

…………………………………………………………..

9. Groundwater is called by this name.

…………………………………………………………..

10. The quality of fresh water affects the life of living organisms live in it.

…………………………………………………………..

11. We should turn off water during washing dishes. .

…………………………………………………………

12. Paper clips are pulled toward the magnet.

………………………………………………………………………………..

13. The ball changes its direction after we throw it upwards.

………………………………………………………………………………..

14. Gravity of Earth is greater than gravity of the moon.

15. Skydiver opens his parachute during landing.

………………………………………………………………………………...

16. When you press the bicycle brake, its speed will stop moving after few seconds.

………………………………………………………………………………

17. Some iron nails are attracted to a magnet.

………………………………………………………………………………

18. Occurrence of day and night…………………………

19. Half of Earth appears dark at night……………………

20. Stars seem to move in the sky.
21. Cycle of four seasons.



17. What happens to...?

1. Animals that live in lakes if they dry up.
2. The eggs of a frog if it lays its eggs in a river instead of a pond
3. Aquatic organisms eat pieces of plastic instead of their real food.
4. Water is collected in a low-lying area.
5. The quality of fresh water becomes poor
6. The river water meets the sea water.
7. The rate of the rainfall increase on a river.
8. The distance between the moon and Earth increases to twice.
9. .The mass of the moon decreases to half.
10. You squeeze a spring then leave it free.
11. There is no gravity on Earth.
12. The gravity of the Sun disappears.
13. The speed of skydiver if he opens his parachute during landing.
14. A metal ball and a feather are fallen down from a tower.
15. Earth rotates round its axis.
16. Earth revolves around the sun.



Model answers

1. Choose the correct answer:-

25. C	26. C	27. A	28. C	29. A	30.D	31. B	32.A
33. B	34. b	35. a	36. d	37. b	38. a	39. b	40. d
41. A	42. d	43. a	44. c	45. c	46. c	47. b	48. c
49. C	50. c	51. a	52. a	53. b	54. b	55.a	56.b
57. C	58. d	59. c	60.d	61. b	62. c	63. b	64. d
65. B	**66. d**	**67. b**	**68. a**	**69. c**	**70. b**	**71. d**	**72. d**
73. D	**74. d**	**75. c**	**76.d**	**77. b**	**78. b**	**79. c**	**80.b**

2. Write the scientific term:-

1. lake	2. estuary	3. water cycle	4. weathering	5. erosion
6. geosphere	7. hydrosphere	8. cryosphere	9. atmosphere	10. biosphere
11. biome	12. oceanns	13. shallow areas	14. intertidal zone	15. water pollution
16. hydrologist	17. lake	18. Estuary	19. watershed	20. fresh water
21. dams	22. water	23. glaciers	24. micro plastic	25. underground water
26. wetland	27. Delta	28. dam	29.undergroundwater	30. oceans
31. force	32. magnetism	33.cycle of dy and night	34. earth ‘s axis	35. night
36. cycle of seasons	37. magnetism	38. rotation	39. air resistance	40. law of motion
41. friction				



3. Complete:

1. biosphere	2. weathering,erosion	3. solid-gaseous	4. rivers- salt	5. estuary
6.runoff	7. crust- mantle	8. glaciers	9. fresh-salt	10.sunlight
11. summer	12. still- runnig	13. salt water-fresh	14. rivers-lakes	15. oceans-seas
16. electricity	17. solid	18. estuary	19. underground water	20. fresh water
21. wetland	22. rains	23. groundwater	24. oil-trees	25. cotton
26. decrease	27. gravity	28. earth	29. center	30. decreases
31. tides	32.increses	33. magnetism	34. gravity	35. more, bigger
36. gravity	37. air resistance	38. rotation	39. moons	40. hot gases
41. planets-moons				

4. Correct the underline word:-

1. star	**2.reflects**	**3. sun**	**4. 1 year**
5. friction(pushing)	**6. opposite**	**7. slowdown**	**8. moon**
9. decreases	**10. sun**	**11. hydrosphere**	**12. summer**
13. biosphere	**14. streams**	**15.oceans**	

5- Put ✓ or x

1. ✓	**2. x**	**3. ✓**	**4. X**	**5. ✓**	**6. X**	**7. ✓**
8. ✓	**9. X**	**10. ✓**	**11. x**	**12.x**	**13. ✓**	**14. x**
15. ✓	**16. ✓**	**17. x**	**18. ✓**	**19. ✓**	**20. ✓**	**21. ✓**



6-

1. Waste water
2. Sand
3. Charcoal
4. Cotton

5. Filtered water

b. filter – wastes

7- 1. Dam 2. Quality 3. Electricity 4. Rains

8-1. filter 2. Charcoal- sand 3. Harmful wastes 4. Mud

9-1. gravity 2. Float 3. Orbit

10- 1. b 2. A

11- 1.day and night – 2. Seasons – 3. Rotation-24 hour 4. Revolution – year



12- 1. The sun 2. Ellipse 3. Gravity

13- Match

1-b 2-c 3-d 4-a

14- Decrease – geosphere – fresh

15- Match

1-c 2-a 3-d 4- b

16- Give reason:-

1. Because the plants use water in photosynthesis process.

2. Because water causes weathering and erosion of rocks

3. Because around 70% of earth are covered by water.

4. Because the plant use carbon dioxide gas in photosynthesis process.

5. Because they need water to grow, and survive

6. Because it is still water, so eggs cannot move away.

7. Because the sunlight can't reach it.

8. because of the gravity of the sun

9. Because it lies under the surface of the Earth. .

10. Because the Poor quality of fresh water leads to:

- The death of thousands of living organisms.

-The extinction of some species lives in fresh water

11. Because the amount of fresh water on earth is limited.

12. due to the force of magnetism.

13. Because the gravity pulls it downward.

14. Because the mass of earth is bigger than the moon



15. To slow down its speed, by increasing the air resistance.
16. due to the friction force
17. due to the force of magnetism.
18. Because the rotation of earth around its axis
19. Because it doesn't receive the sunlight.
20. due to the rotation of the earth around its axis
21. due to the revolution of the earth around the sun

17- What happens if …?

1. They may die.
2. They will move away with the running water.
3. They get harmed.
4. A lake is formed.
5. It may cause the death of thousands of living organisms.
6. An estuary is formed
7. It will cause flooding
8. The gravity of the earth to the moon will decrease.
9. The gravity of the moon will decrease to half
10. It will be pushed back when you leave it.
11. Everything will float off
12. Planets will float off into space and leave their orbits.
13. His speed will decrease.
14. The metal ball will reach to the ground first.
15. Cycle of day and night occurs
16. Cycle of four seasons occurs.



Name: ………………………….

Class: ………………………

Science Final Revision Model Answer

Q1: Choose the correct answer:

1. At the beginning of water cycle in nature, water evaporates into the air forming….
   a. **clouds** b. snow c. water vapor d. ice
2. 97% of earths water is…….
   a. freshwater b. **saltwater** c. frozen water d. sugar water
3. All the following are factors affecting the breakdown of plastics into microplastics, except………...
   a. sunlight b. wind c. **Moon** d. sea weaves
4. Among the examples of freshwater bodies in which more than 10% of the world animal species live are……
   a. rivers and seas c. streams and seas
   b. oceans and teas d. **rivers and streams**
5. Water is used in all the following except.........
   a. cooking b. **burning** c. bathing d. manufacturing
6. Which of the following is part of the biosphere?......
   a. Ice b. Water c. Cloud d. **Animals**
7. The number of earths layers that form geosphere is…….layers.
   a. Two b .**Four** c. Six d. Eight
8. Hydrologist study the movement of............across the Earth.
   a. Air b. Rocks c. **Water** d. Plants
9. Water can control the……..of living organisms body bodies.
   a. Length b. Height c. Volume d. **Temperature**

10. ………….are formed when water collects in low-laying areas.
   a. Seas b. Oceans c. **Lakes** d. Rivers

11. Groundwater is present under earth's surface in rocks and soil pores. This is an interaction between……….
   a. Geosphere and atmosphere
   b. Biosphere and atmosphere
   c. **Geosphere and hydrosphere**
   d. Hydrosphere and biosphere

12. Estuary have a mixture of…...
   a. Groundwater and rainwater
   b. **Fresh water and salt water**
   c. Groundwater and freshwater
   d. Rain water and salt water

13. Water covers nearly…….. of earth planet.
   a. 1/4 b. **3/4** c. 1/5 d. 1/2

14. All the following water bodies contain salt water, except……..
   a. Gulfs b. seas c. **Rivers** d. Oceans

15. All the following organisms can be negatively affected by throwing plastic waste in seas, except………….
   a. Fish b. Corals c. Shrimps d. **Foxes**

16. Among the sources of water which human can use for drinking ……
   a. seas b. oceans c. salt water lakes d. **rivers**

17. Rainwater is a part of…
   a. biosphere b. **hydrosphere** c. geosphere d. atmosphere

18. All the following are salt water lakes, except…………
   a. Lake Assal
   b. **Lake Nasser**
   c. Lake Idku
   d. Lake Bardawil

19. The floor of……...may contain mountains and plateaus
   a. **oceans** b. wetlands c. rivers d. lakes

20. Rocks are broken down into smaller particles during……..process.
   a. photosynthesis
   b. erosion
   c. **weathering**
   d. respiration

21. Falling of a small tree due to blowing of strong winds is an example of an interaction between………....
   a. geosphere and atmosphere
   b. hydrosphere and geosphere
   c. biosphere and hydrosphere
   d. **atmosphere and biosphere**

22. Among animals that can be found in ponds are……….
   a. Lions
   b. **salamanders**
   c. dogs
   d. whales

23. The amount of salt water on earth is……….the amount of freshwater
   a. **more than**
   b. less than
   c. equal to
   d. half

24. Mountains and valleys are parts of…………..
   a. **geosphere**
   b, atmosphere
   c. biosphere
   d. hydrosphere

25. The scientists who study water conditions are called.............
   a. biologists
   b. **hydrologists**
   c. geologists
   d. ecologists

26. A triangular-shaped area of mud and other sediments that form when river meets a sea is called…..
   a. estuary
   b. **delta**
   c. river
   d. mountain

27. Which of the following is considered an interaction between biosphere and atmosphere?.......
   a. Estuaries
   b. Still water
   c. **exhaled air**
   d. atmospheric air

28. Coral reefs live in ………..of aquatic ecosystem.
   a. Frozen area
   b. Fresh water
   c. abyssal zone
   d. **shallow areas**

29. It results from the interaction between biosphere and atmosphere…….
   a. Availability of oxygen gas
   b. Rain falling on lands
   c. **photosynthesis by plants**
   d. fish swimming in water.

30. Moses fish are found in ………..
   a. Nile river
   b. **Burullus Lake**
   c. streams
   d. ponds

31. An example of salt water ecosystem, ………….
   a. Nile River
   b. **Assal lake**
   c. A glacier
   d. Nasser Lake

32. Most of fresh water under earth surface is in the form of ………….
   a. **Groundwater**
   b. rivers
   c. glaciers
   d. streams

33. All of the following are part of the geosphere, except………..
a. Minerals b. **helium** c. rocks d. molten rocks

34. Insects lay their eggs in systems that found in ………
a. streams b. **ponds** c. sea d. rivers

35. Weathering of rocks by water indicates an interaction between ……….
a. **hydrosphere and geosphere**
c. biosphere and hydrosphere
b. biosphere and atmosphere
d. atmosphere and hydrosphere

36. Water that covers most of the Earth's surface is…………
a. fresh water in rivers
c. **salty water in seas and oceans**
b. fresh water in groundwater
d. freshwater in groundwater

37. seas and oceans water meet rivers water at…………
a. water sheds b. **estuary** c. surface canal d. underground

38. An area of land where all the water flow to a common location is called……..
a. river b. estuary c. **watershed** d. mountain

39. Each planet rotates around the sun in a fixed……..
a. **orbit** b. street c. ocean d. universe

40. when the mass of an object increases, the gravitational force…..
a. decreases b, **increases** c. stay the same d. is constant

41. The gravitational force of an object increases when the distance between the objects………..
a. Is constant b. increases c. **decreases** d. doesn't change

42. The moon revolves around ……….due to gravity.
a. Itself b. the sun c. **the Earth** d. the clouds

43. If the distance between the moon and Earth is doubled, the gravity attraction between them will……….
a. Increase b. **decrease** c. remain constant d. equal zero

44. The gravity on the top of the mountain is……………… the gravity on the ground.
a. More than b. **less than** c. equal to d. same as

45. ………..is a pull or push that is applied on an object.
a. Gravity b. **Force** c. Work d. Moon

46. Planets revolve around the sun because it is the ……….object in the solar system.
    a. Hottest   b. smallest   c. **biggest**   d. coldest

47. What prevents objects from floating in space?
    a. Electricity   b. **Gravity**   c. Space suit   d. Magnetism

48. If the distance between the moon and Earth decreases by half, the gravity force between them …………
    a. **Increases**   b. decreases   c. doesn't change   d. disappears

49. Gravity depends on the……….of objects.
    a. color   b. speed   c. **mass**   d. temperature

50. All the following are examples of the effect of gravity, except………..
    a. A balls drops from your hand.   C. **a magnet attracts a nail**.
    b. A girl falls from a bike   d. pouring oil

51. What is the force responsible for the stability of objects on the Earth?
    a. **Gravitational force**   c. Friction force
    b. Temperature of air   d. Magnetism force

52. The moon revolves in a fixed orbit around the Earth because………
    a. The Earth has more gravity   c. the moon has a magnetic force
    b. The Earth has greater mass   d. **(a) and (b)**

53. Friction is force that arises between two objects touching each other and………their movement.
    a. Speed up   b. **slow**   c. doesn't change   d. no correct answer

54. Which of the following objects will be attracted by the magnet?
    a. A wooden spoon   c. An iron spoon
    b. A nickel spoon   d. **(b) and (c)**

55. Magnetism is a force that attracts……….objects.
    a. Non-metal   b. wooden   c. plastic   d. **metal**

56. The sun always rises in the ………….and travels across the sky.
    a. North   b. south   c. **east**   d. west

57. The sun appears nearly in the center of the sky………..
    a. At night   b. **at noon**   c. in early morning   d. in late afternoon

58. The rotation of Earth around its axis causes………….
   a. occurring of day and night
   b. Sun appears to move in the sky
   c. movement of shadows
   d. **all the previous**

59. We are moving with earth with the …………..speed of earth.
   a. Different   b. higher   c. lower   d. **same**

60. Shadows are longer during ……….
   a. Morning   b. afternoon   c. noon time   d. **(a) and (b)**

61. The ………..affect the sundial shadow.
   a. Amount of sunlight
   b. Position of the sun in the sky
   c. position of the moon in the sky
   d. **(a) and (b)**

62. ……..is a group of stars that looks like a certain shape in the sky.
   a. Planet   b. **Constellation**   c. Moon   d. Solar system

63. Location of constellation during the year help us to know the direction of…….
   a. East   b. West   c. North and South   d. **all the previous**

64. The constellation Orion's name is relative to a mythical …………
   a. animal   b. plant   c. **hunter**   d. place

65. Every night, we see new………… appear from the east.
   a. Sun   b. planet   c. **star**   d. moon

66. Which of the following help scientists to see distant objects in more details?
   a. Binoculars   b. telescope   c. eyeglasses   d. **(a) and (b)**

67. ………..is the wide space that contains celestial objects such as galaxies, stars and planets.
   a. Earth.   b. **Universe**   c. constellations   d. Galaxy

68. The scientist who proved that the Sun is the center of the solar system is………
   a. **Copernicus**   b. Galileo   c. Newton   d. Albert Einstein

69. The scientist who explained that the sun converts matter into light and heat is………
   a. Copernicus   b. Galileo   c. Newton   d. **Albert Einstein**

Q2: Write the scientific term:

1. A water body surrounded by land.	**Lake**
2. The frozen water part of the hydrosphere.	**Cryosphere**
3. A cycle that shows the continuous movement of water from the Earth to the atmosphere then to the Earth again.	**Water cycle**
4. The process of breaking down of rocks into smaller particles due to the effect of wind, water and temperature.	**Weathering**
5. The process of transporting small particles of rocks and soil from a place to another by the effect of water and wind.	**Erosion**
6. The Earth's system which consists of a mixture of gases surrounding Earth.	**Atmosphere**
7. The system of Earth which contains all different landforms.	**Geosphere**
8. The system that includes humans, animals and plants on Earth.	**Biosphere**
9. A large area of the world that has similar soil, climate, plants and animals.	**Biome**
10. The area along the coast that disappears at the high tide and appears at the low tide.	**Intertidal zone**
11. Areas of the ocean which contain coral reefs and intertidal zones.	**Shallow area**
12. An area where a river meets an ocean or sea.	**Estuary**
13. The largest saltwater ecosystems that cover large parts of Earth's surface.	**Oceans**
14. Tiny plastic particles that result from the breakdown of larger plastics	**Microplastics**
15. It is the liquid that makes up about two-thirds of the human body.	**Water**
16. A type of water which is suitable for drinking.	**Fresh water**
17. A water body that flows from high area to lower area.	**River**
18. The type of water that represents 3% of water on Earth.	**Fresh water**
19. The water body that is stored in the cracks and pores of underground rocks.	**Groundwater**
20. A water body that is constantly moving in the form of waves.	**Ocean / sea**
21. The water bodies that surround the continents.	**Oceans**
22. The largest saltwater ecosystem that cover large parts of earth’s surface.	**Oceans**
23. A huge building established across a river to hold water and generate hydroelectricity.	**Dam**
24. The liquid that makes about two-thirds of the human body.	**Water**
25. A water body that often starts in the mountain as a stream.	**River**
26. A water body which contains a mixture of sea water and river water.	**Estuary**
27. An invisible force that pulls objects towards the center of Earth.	**Gravity**
28. The system that consists of the sun and the planets revolving around it.	**Solar system**
29. A change in the position of an object compared to another object.	**Motion**

30. A force that opposes the movement of an object as it passes through air.	**Air resistance**
31. A force arises between two objects touching each other and slow their movement.	**Friction**
32. A tool used by the sky-diver to slow his drop.	**Parachute**
33. A fixed path that each planet revolves around the sun in it.	**Orbit**
34. The imaginary line that passes through the poles of the Earth.	**Axis**
35. A phenomenon that happens when half of the Earth doesn't receive the sunlight.	**Night**
36. A phenomenon that occurs due to rotation of earth around its axis.	**Day and night**
37. They are shiny bodies made of gases and can make their own light.	**Stars**
38. A group of stars that form a pattern or looks like a certain shape in the sky.	**Constellation**
39. A group of stars, planets and other celestial bodies held together by gravity.	**Galaxy**
40. The wide space that contains celestial bodies such galaxies, stars and planets.	**Universe**
41. They are giant spheres of superhot gases, most of them are hydrogen and helium.	**Stars**
42. It is a medium-sized star that appears longer and brighter to us.	**Sun**
43. The superhot gases that make up the stars.	**Helium and hydrogen**
44. A tool used by scientists to see celestial bodies in more details.	**Telescope**
45. The protective layer around the earth that lets some light waves through and block others.	**Atmosphere**

Q3: Correct the underlined word:

1. The system that includes rocks and heavy metals is called **hydrosphere**.	**Geosphere**
2. Water can change into **ice** in extreme hot weather.	**Water vapor**
3. A **lake** always flows from high area to lower area.	**River**
4. When water carries seeds of plants to new places; an interaction between biosphere and **atmosphere** occurs.	**Hydrosphere**
5. Water vapor moves from hydrosphere to **geosphere**.	**Atmosphere**
6. **Hydrosphere** is a mixture of gases.	**Atmosphere**
7. The word "hydro" refers to **earth.**	**Water**
8. The Earth consists of 4 layers which are crust, **mountain**, outer core and inner core.	**Mantle**
9. Most lakes have **saltwater**.	**Freshwater**
10. Bats and dolphins are part of the **geosphere**.	**Biosphere**

11. The deep areas of oceans are called **shallow zones**.	Abyssal zone
12. Some lakes and ponds may dry up in **winter**.	Summer
13. The place where river and **lake** meet is called estuary.	Sea / ocean
14. Rivers and streams are **saltwater** moving bodies.	Freshwater
15. Water make about **one-third** of human body.	Two-third
16. Saltwater is found mostly in **rivers** and **streams**.	Oceans and seas
17. Saltwater represent almost **3%** of hydrosphere.	97 %
18. Estuary is formed when the river meets a **lake**.	Sea / ocean
19. We can drink the water of **seas**.	Rivers
20. There is **a lake** between Nile river and Mediterranean Sea.	Estuary
21. The water under the earth surface is called **streams**.	Groundwater
22. Rivers often start in mountains in the form of **estuaries**.	Streams
23. **Ocean** is a large water body surrounded by land.	Lake
24. When there is more rainfall, the water level in rivers increases, causing **drought**.	Flood
25. Crayfish and trout fish survive in **lakes**.	Rivers
26. Starfish and dolphins survive in **rivers**.	Oceans / seas
27. Insects lay their eggs in still water bodies such as **rivers**.	Lakes / ponds
28. Salty lakes are an interaction between hydrosphere and **atmosphere**.	Geosphere
29. Coral reefs live in **abyssal zone** of aquatic systems.	Shallow area
30. Gravity **pushes** objects toward the center of earth.	Pulls
31. **Magnetism** is a type of friction force.	Air resistance
32. The mass of Earth is **equal to** the mass of moon.	More than
33. Planets revolve in fixed orbits due to the gravity between the **moon** and the planets.	Sun
34. As the mass of object increases, its gravitational force **decreases**.	Increases
35. The gravity pulls the objects toward the **surface** of the earth.	Center
36. The moon revolves around the earth due to **air resistance** force.	Gravity
37. The paper falls down toward the floor due to **air resistance**.	Gravity
38. The change of an object position is called **force**.	Motion
39. Magnet has an invisible force called **gravity**.	Magnetism
40. The gravity of the **star** affects the ocean tides.	Moon
41. The gravity of big planets is **equal to** the gravity of small planets.	More than

42. Gravity has **upward-pulling** force.	**Downward-pulling**
43. Air resistance is a type of friction between objects and **water**.	**Air**
44. The bicycle stops due to the **attraction** force between the tire and the road.	**Friction**
45. When the sky-diver opens his parachute, his speed of falling decreases due to **water resistance**.	**Air resistance**
46. A person can control the speed of his bike by using the **lights** found on the tire.	**Brakes**
47. Air resistance force acts in the **same** direction of gravity force.	**Opposite**
48. The earth revolves around the **moon** in fixed orbit.	**Sun**
49. The orbit of each planet has a **circular** shape.	**Oval**
50. The **earth** great gravity keeps all planets in their orbits.	**Sun**
51. Earth takes **12 hours** to make a complete cycle on its axis.	**24 hours**
52. When half of earth's faces the sun, this part has **night**.	**Day**
53. Earth rotation around its axis causes the **season**.	**Day and night**
54. Earth revolve around the sun once every **one day**.	**One year**
55. In the morning, the sun appears in the **north**.	**East**
56. Earth revolution around the sun causes **day and night** phenomenon.	**Seasons**
57. The shadow of the tree is shortest in the **afternoon**.	**Noon**
58. Day and night phenomenon occur due to the spinning of earth around its **moon**.	**Axis**
59. All **planets** make their own light.	**Stars**
60. Stars emit their light due to the reaction between helium and **nitrogen** gases.	**Hydrogen**
61. The solar system contains **seven** planets and more than 200 moons.	**Eight**
62. Earth rotates on its axis in **clockwise** direction.	**Counterclockwise**
63. **High** quality of fresh water leads to the death of marine organisms.	**Poor**
64. The orbit that each planet revolve in around the sun has as **circular** shape.	**Oval**
65. The **moon** is the center of motion in the solar system.	**Sun**
66. The spinning of an object around its axis is called **revolution**.	**Rotation**
67. The sun exists in the center of the sky in the **afternoon**.	**Noon**
68. The main source of light and heat on earth is the **constellations.**	**Sun**

Q4: Mention:

a. Three animals that live in streams: **Catfish – crayfish - trout**.
b. Three animals that live in seas: **Dolphins – starfish - sea lions - whales**
c. Two sources of freshwater: **Rivers - groundwater**
d. Two sources of saltwater: **Oceans - seas**

Q5: Give reasons for:

1. Water is important for all plants on Earth.
   Because plants need water to make their own food to grow and survive.
2. Our planet looks like a blue marble from the space.
   Because it is covered with large amounts of water.
3. The atmosphere is important for plants in making their food.
   Because plants use carbon dioxide in the air, to make photosynthesis.
4. Mosquitoes lay their eggs in ponds.
   Because ponds are still water so the eggs will not be lost.
5. No green plants can survive in the abyssal zones (deep zones) of oceans.
   Because sunlight doesn't reach deep areas of oceans.
6. You should turn off water tap during brushing your teeth.
   To conserve water
7. Some ponds and lakes may dry up during some months.
   Because of drought and less rainfall.
8. We must conserve fresh water.
   Because its amount is limited on earth.
9. When you throw the ball in the air, it falls down toward the ground.
   Due to gravity force of earth.
10. The astronaut floats when he gets out of the Earth (in the space).
    Because there is no gravity in the space.
11. The moon revolves around the Earth in a fixed orbit.
    Due to the gravitational force of earth.

12. The moon doesn't fall on Earth or collide with it.
    Because the moon's gravitational force keeps it from crashing into Earth.

13. The earth's gravity is stronger than the moon's gravity.
    Because the mass of earth is bigger than the mass of the moon.

14. Iron nails are attracted to magnets.
    Because magnet has a magnetic force.

15. The bike stops when you stop pedaling.
    Due to the friction force between the tire and the road.

16. When the skydiver releases the parachute, the speed of drop slows down.
    Due to air resistance that pushes the parachute upward.

17. The sun is considered the center of movement in the solar system.
    Because it has the largest gravitational force.

18. Planets revolve around the sun in fixed orbits.
    Due to the gravitational force of the sun.

19. The sun appears to move across the sky and change its position throughout the day.
    Due to the rotation of earth around its axis.

20. The shadow of objects moves during the day.
    Because the sun have different positions in the sky due to rotation of earth around its axis.

21. The stars appear bright and shiny in the sky.
    Because they emit their own light.

22. The moon appears bright and shiny although it doesn't make its own light.
    Because it reflects the sunlight falling on it.

23. Binoculars and telescopes have a great importance for humans.
    Because they help us to see distant objects in more details.

24. The sun looks much bigger than other stars.
    Because it is the nearest star to us.

25. Astronauts cannot be sent to study the stars or other celestial bodies.
    Because they are far away from us.

Q6: What happens if…….?

1. There is no gravity between the moon and Earth.

   The moon will float away in the space.

2. The distance between the moon and Earth is doubled. (according to the gravity between them).
   The gravitational force between them will decrease.

3. There is no gravity on the Earth's surface.

   Nothing will stay stable on earth.

4. There is no air resistance when you drop a hammer and a paper at the same time.
   Both of them will reach the ground at the same time.

5. Earth doesn't rotate around its axis.
   There will be no cycle of day and night.

Q7: Match between column (A) and column (B):

(A)	(B)
1) Moon's gravity	A. Causes the movement of the moon around the earth.
2) Earth's gravity	B. Makes the planets revolve around the sun.
3) Sun's gravity	C. Causes tides in the oceans.

1)…C…. **2)…A….** **3)…B….**

Q8: Match between column (A) and column (B):

(A)	(B)
1) Air resistance	A. It is a force generated between two touching surfaces.
2) Magnetism	B. It is a force that opposes the movement of an object as it passes through the air.
3) Friction	C. It is a force that attracts metal objects.

1)…B…. **2)…C….** **3)…A….**

Q9: Match between column (A) and column (B):

(A)	(B)
1) The Sun	A. can be attracted by a magnet
2) Air resistance	B. keeps the atmosphere around Earth.
3) Gravity	C. pulls all planets toward it.
4) Nickel and cobalt	D. is a type of friction force

1)…C…. **2)…D….** **3)…B….** **4)…A….**

Q10: Match between column (A) and column (B):

(A)	(B)
1) Hubble telescope	A. Are giant spheres of superhot gases.
2) Copernicus	B. A constellation of a mythical hunter
3) Stars	C. is a device used to look closer to distant objects in more details.
4) Orion	D. is the scientist who proved that the sun is the center of the solar system

1)…C…. **2)…D….** **3)…A….** **4)…B….**